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THE PEOPLE'S OWN
BOOK OF RECIPES,
AND
INFORMATION FOR THE MILLION.



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THE PEOPLE'S OWN BOOK OF RECIPES;

AND
INFORMATION FOR THE MILLION.

CONTAINING

DIRECTIONS FOR THE PRESERVATION OF HEALTH—FOR THE
TREATMENT OF THE SICK, AND THE CONDUCT OF THE
SICK-ROOM:—WITH A FULL DISCUSSION OF THE
MORE PROMINENT DISEASES THAT AFFLICT
THE HUMAN FAMILY, WITH FULL
DIRECTIONS FOR THEIR RA-
TIONAL TREATMENT.

ALSO:

1000 PRACTICAL AND USEFUL RECIPES,

EMBRACING EVERY DEPARTMENT OF DOMESTIC ECONOMY, AND
HUMAN INDUSTRY; WITH COPIOUS NOTES AND RE-
MENDATIONS, EXPLANATORY AND SUGGESTIVE.

COLLECTED, ✓ COLLATED, ARRANGED AND EDITED, BY
S. S. SCHOFF AND B. S. CASWELL, M. D.

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Price, Handsomely Bound in Cloth, \$1.50  
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PREFACE.

TO THE PUBLIC.

Read this preface. In this fast age of the world, few people stop to read the preface to a book, but we insist upon our right in this instance to an introduction before we are put through the ordeal of scrutiny and criticism. We can better explain our purposes, our aims and intentions, and what we have striven to do for, and what we ask of, the public, in a few words, confidentially spoken, than this same public could do it for us, perhaps, after having made a hasty, and ten to one, a careless examination of our book.

In an editorial career of twenty years, which has been devoted more to the wants, wishes and demands of the public for whom we labored, than for the gratification of any selfish desires or the accomplishment of any selfish end or aim, it is safe to assume that we have had an opportunity to acquire some idea of what those wants, wishes and needs of the masses for whom and with whom we have so long labored, are. And we may also assume that such an expe-

rience has given us a great many facts, and a great many items of valuable information, which brought together, arranged, condensed and put into convenient form for preservation, would be valuable to everybody. For years we have been collecting and preserving such facts and items as seemed to us intrinsically valuable, and this book, "*The People's own Book of Recipes*," is the result of our labors.

We give the work to the public, confident that, with all its failings and shortcomings, which owing to circumstances, no doubt, are many, it contains much practical information and many useful facts, that every man and woman will almost daily make use of. We do not claim, of course, that everything in this book is new or original, or something that nobody has heard of before, but we do claim that it is a compilation of a thousand useful and valuable things in such shape and form that every person may have them at his or her hand for convenient reference.

"Knowledge is power." Materials lie around us everywhere, scattered by the hand of a wise and beneficent Providence, for our profit, our enjoyment, and advancement in all the elements of progress and prosperity. All that is wanted is the knowledge to enable us to use those means—to utilize, as it were, the "raw material," for unnumbered blessings and conveniences. The object of the "*People's Own*," is, in a measure, to furnish that knowledge—to put

into the hands of every person a thousand useful, practical facts that are always at hand just when they are wanted.

There is not a man nor a woman in any condition of life, whatever may be his or her profession or calling, who will not more or less frequently be in want of the knowledge of the very facts we have here crystalized, so to speak, and rendered indestructible. Our aim has been to furnish only the useful and practical. We have put nothing in merely "to fill up," but have made the most of our space. Every item has been weighed in the balance of usefulness and intrinsic value.

Many of the recipes we give are now published for the first time; they have been sold through the country by agents and peddlers, some of them at exorbitant prices. Others have been published in newspapers, which have been lost or destroyed, and even if preserved, can never be found when wanted. With the copious and convenient index given, it is but the work of a moment to turn to the remedy or treatment of almost any accident or sudden attack of disease.

In case of sudden attack of cholera, cholera morbus, or summer complaint, the first duty of course is to send for a physician, but in the meantime something must be done, and with this book at hand, you find at once what that should be. And in reference to this matter of cholera, there is every reason

to suppose that the summer of 1867 will be characterized by a more general prevalence of the cholera and choleraic diseases than the last year witnessed. The treatment we give is that publicly recommended last season by the Boards of Health of nearly every large city where the cholera made its appearance.—“An ounce of prevention is better than a pound of cure,” is a very trite maxim, but it is true and to the point. This cholera treatment that we give, is for the most part, preventive.

In the newer parts of our country the great west, the northwest and southwest, the pioneers, the men who stick their stakes out into the wilderness, and found settlements, are liable to be bitten by rattlesnakes, massaugas and copperheads—the most common of the deadly poisonous snakes of this section of the country. In such cases when a few hour's delay may prove fatal to some loved member of the family, you have here the certain remedy for immediate application. In case of bite by rabid dog, which is every day becoming of more frequent occurrence, when a few hours' delay subjects the sufferer to certain death by that most dreadful of all diseases, hydrophobia, you turn at once to your “People's Own” and find the treatment simple and plain, that will destroy at once the deadly virus, and set at rest all apprehension. In case of accidental drowning or suspended animation from that cause, you have here full instructions for the

most approved treatment, by the application of which many a precious life has been saved. It is one of the weaknesses of human nature, that we should always provide against, that in cases of sudden emergency, when coolness and concentration are most needed, nine out of every ten persons are so bewildered and flustered, that they know not what they should do—they cannot think nor act—though under ordinary circumstances they might know what to do and how to do it. With this book to refer to, they are masters of the situation, and with its clear and definite instructions coolness and confidence are at once restored, and they proceed without doubt or trepidation in the discharge of the duty demanded by the occasion.

The farmer's horse may be attacked by some of the numerous diseases that afflict this noble animal. In nine cases out of ten, a valuable animal may be saved by knowing what to do and when to do it.—We give certain and reliable remedies, whose efficacy has been proved in numberless cases for all of the more fatal disorders that attack the horse. Some of them, men have paid \$50 or \$100 for, and after using, have declared them cheap at that. Cattle, sheep, hogs, and all domestic and useful animals are subject to disorders which are easily cured if taken in season, and rightly treated. We give in this book the most approved cures and method of treat-

ment pursued by the most successful veterinary surgeons.

The mechanic and artisan will find in these pages a thousand facts and items of information especially adapted to their business and profession, and which will perforce, when once known, be brought into daily use, and made valuable and remunerative.

In the household—in a thousand little things that contribute so largely, in the aggregate, to our health, happiness, enjoyment, convenience and success in life—these pages will be most consulted, and therefore most valuable. Without casting any reflections upon anybody, it is certain that the science and art of housekeeping with its onerous duties and responsibilities, were never so much neglected as at the present day. With housekeeping, as it used to be with farming, it seems to be supposed that the knowledge of its duties and requirements will come of itself or by intuition. . . While years of study and practice with high salaried teachers, are devoted to learning to play on the piano, which in ninety-nine cases out of a hundred will result only in the means of a few years' or a few months', perhaps, pastime, no time nor teaching is given to what is really and inevitably the occupation of a lifetime. We state these facts with no intention of criticising or complaining, but merely to show the help that such a book as this must necessarily be in every household. Here is the knowledge ready prepared for the house-

keeper, for constant reference, that could only be obtained otherwise by years of study and practice.

Another feature of this work to which we wish to call attention, is the running comment on almost every recipe, and every subject introduced. Much information and many useful facts are given in the comments that could not be given in the form of a recipe. These portions are printed in large type, and leaded, in order to show the reader at a glance if looking for a recipe, where it may be found. Our advice to every one is, read the comment before attempting to use the recipe, and thus learn all about it.

In conclusion we can only say to the purchaser of our book ; we have done our best to give you the worth of your money. And we have the confidence to believe that we have done it. We declare it as our conviction that no man nor woman, no matter what his or her station or circumstances in life may be, will buy "The Peoples Own," without getting more than its cost out of it.

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HOUSEHOLD RECIPES.

Cholera—Remedies and Treatment.

Of course we do not propose to offer a recipe for the cure of Cholera. It is a Disease that demands the highest skill of the faculty; yet it is a disease that often does its work of death so suddenly that an hour or two, and sometimes even half an hour, consumed in sending for the doctor, is fatal to the patient. The treatment and remedies recommended in the following card from that eminent christian Missionary, Dr. Hamlin, who was for several years a Missionary at Constantinople, and whose experience in treating cholera extended through three visitations of that disease in Turkey has been approved by so many eminent physicians and Boards of Health everywhere, that we are confident that it cannot but be of incalculable advantage to have it preserved in this form in every household.

DR. HAMLIN'S LETTER.

DEAR SIR: The cholera, which has just left us, after committing fearful ravages, is making its way into Europe and will probably cross the Atlantic before another steamer has passed.

Having been providentially compelled to have a good degree of practical acquaintance with it, and to see it in all its forms and stages during each of its invasions of Constantinople, I wish to make to my friends in Maine some suggestions which may relieve anxiety or be of practical use.

1. On the approach of cholera every family should be prepared to treat it without waiting for a physician. It does its work so expeditiously that, while you are waiting for the doctor the work is done.

2. If you prepare for it, it will not come. I think there is no disease which may be avoided with so much certainty as the cholera. But providential circumstances, or the thoughtless indiscretions of some member of a household, may invite the attack, and the challenge will never be refused. It will probably be made in the night, your physician has been called in another direction, and you must treat the case yourself or it will be fatal.

CAUSE AND SYMPTOMS.

3. *Cause of attack.*—I have personally investigated at least a hundred cases, and not less than three-fourths could be traced directly to improper diet, or to intoxicating drinks, or to both united. Of the remainder, suppressed perspiration would comprise a large number. A strong, healthy, temperate laboring man had a severe attack of cholera, and after the danger was passed I was curious to ascertain the cause. He had been cautious and prudent in his diet. He used nothing intoxicating. His residence was in a good locality. But after some hours of hard labor and very profuse perspiration he had lain down to take his customary nap, right against an open window, through which a very refreshing breeze was blowing. Another cause is drinking largely of cold water when hot and thirsty. Great fatigue, great anxiety, fright, fear, all figure among inciting causes. If one can avoid all these he is safe from the cholera as from being swept away by a comet.

4. *Symptoms of an Attack.*—While cholera is prevalent in a place, almost every one experiences more or less disturbance of digestion. It is doubtless in part imaginary. Every one notices the slightest variation of feeling, and this gives an importance to mere trifles. There are often a slight nausea, or transient pains or rumbling sounds when no attack follows. No one is entirely free from these. But when diarrhoea commences, though painless and slight, it is really the skirmishing party of the advancing column. It will have at first no single character of Asiatic cholera. But do not be deceived. It is the cholera nevertheless. Wait a little; give it time to get hold, and say to yourself, "I feel perfectly well, it will soon pass off," and in a short time you will repent of your folly in vain. I have seen many a one commit suicide in this way.

Sometimes, though rarely, the attack commences with vomiting. But in whatever way it commences it is sure to hold on. In a very few hours the patient may sink into the collapse. The hands and feet become cold and purplish, the countenance at first nervous and anxious, becomes gloomy and apathetic, although a mental restlessness and raging thirst torments the sufferer while the powers of life are ebbing. The intellect remains clear, but all

the social and moral feelings seem wonderfully to collapse with the physical powers. The patient knows he is to die, but cares not a snap about it.

In some cases, though rarely, the diarrhœa continues for a day or two, and the foolish person keeps about, then suddenly sinks, sends for a physician, and before he arrives "dies as the fool dieth."

COURSE OF TREATMENT.

1. *For Stopping the Incipient Diarrhœa.*—The mixture which I used in 1848 with great success, and again in 1855, has during the epidemic been used by thousands, although the attacks have been more sudden and violent, it has fully established its reputation for efficiency and perfect safety. It consists of equal parts by measure, of laudanum, spirits of camphor, and tincture of rhubarb. Thirty drops for an adult, on a lump of sugar, will often check the diarrhœa. But, to prevent its return, care should always be taken to continue the medicine every four hours in diminishing doses—twenty-five, fifteen, ten, nine,—when careful diet is all that will be needed.

In case the first does not stay the diarrhœa, continue to give increasing doses—thirty-five, forty, forty-five, sixty—at every movement of the bowels. Large doses will produce no injury while the diarrhœa lasts. When that is checked then is the time for caution. I have never seen a case of diarrhœa taken in season which was not thus controlled, but some cases of advanced diarrhœa, and especially a relapse, paid no heed to it whatever. As soon as this becomes apparent I have always resorted to this course: Prepare a teacup of starch boiled as for use in starching linen, and stir into it a full teaspoonful of laudanum for an injection. Give one third at each movement of the bowels. In one desperate case, abandoned as hopeless by a physician, I could not stop the diarrhœa until the seventh injection, which contained nearly a teaspoonful of laudanum. The patient recovered, and is in perfect health. At the same time I used prepared chalk in ten-grain doses, with a few drops of laudanum and camphor to each. But whatever course is pursued, it must be followed up or the patient is lost.

1. *Mustard poultices.*—These should be applied to the pit of the stomach and kept on till the surface is well reddened.

3. The patient, however well he may feel, should rigidly observe perfect rest. To lie quietly on the back is one-half of the battle. In that position the enemy fires over you, but the moment you rise you are hit.

When attack comes in the form of a diarrhœa these directions will enable every one to meet it successfully.

4. But when the attack is more violent, and there is vomiting, or vomiting and purging, perhaps also cramps and colic pains, the following mixture is far more effective, and should always be resorted to: The missionaries—Messrs. Long, Trowbridge and Washburn—have used it in very many cases, and with wonderful success. It consists of equal parts of laudanum, tincture of capicum, tincture of ginger, and tincture of cardamon seeds. Dose, thirty to forty drops, or a half teaspoonful in a little water, and to be increased according to the urgency of the case. In case the

first dose should be ejected, the second, which should stand ready, should be given immediately after the spasm of vomiting has ceased. During the late cholera seige, no one of us failed of controlling the vomiting, and also the purging, by, at most, the third dose. We have, however, made use of large mustard poultices, of strong, pure mustard, applied to the stomach, bowels, calves of the legs, feet, &c., as the case seemed to require.

TREATMENT OF COLLAPSE.

Collapse.—This is simply an advanced stage of the disease. It indicates the gradual failing of all the powers of life. It is difficult to say when a case becomes hopeless. At a certain point the body of the patient begins to emit a peculiar odor, which I call the death odor, for when that has become decided and unmistakable I have never known the patient to recover. I have repeatedly worked on such cases for hours, with no permanent result. But the blue color, the cold extremities, the deeply-sunken eye, the vanishing pulse, are no signs that the case is hopeless. Scores of such cases in the recent epidemic have recovered. In addition to the second mixture, brandy (a tablespoonful every half hour), bottles of hot water surrounding the patient, especially the extremities, sinapisms, and friction, will often, in an hour or two, work wonders.

Thirst.—In these, and in all advanced cases, thirst creates intense suffering. The sufferer craves water, and as soon as he gratifies the craving, the worst symptoms return, and he falls a victim to the transient gratification. The only safe way is to have a faithful friend or attendant who will not heed his entreaties.—The suffering may be, however, safely alleviated and rendered endurable. Frequent gargling the throat and washing out the mouth will bring some relief. A spoonful of gum arabic water or of camomile tea may frequently be given to wet the throat.—Lyndenham's White Decoction may also be given, both as a beverage and nourishment, in small quantities, frequently. In a day or two the suffering from thirst will cease. In a large majority of cases it has not been intense for more than twenty-four hours.

Diet.—Rice water, arrowroot, Lyndenham's White Decoction, crust water, camomile tea, are the best articles for a day or two after the attack is controlled. Camomile is very valuable in restoring the tone of the stomach.

The Typhoid Fever.—A typhoid state for a few days will follow all severe cases. There is nothing alarming in this. It has very rarely proved fatal. Patience and careful nursing will bring it all right. The greatest danger is from drinking too freely. When the patient seemed to be sinking, a little brandy and water or arrowroot and brandy have revived him. In this terrible visitation of cholera, we have considered ourselves perfectly armed and equipped, with a hand-bag containing mixture No. 1, mixture No. 2 (for vomiting, &c.) a few pounds of pounded mustard, a bottle of brandy a paper of camomile flowers, and a paper of gum arabic.

For convenience we repeat the formulas for mixtures Nos. 1 and 2:

MIXTURE NO. 1 (FOR DIARRHŒA).—Equal parts by measure of laudanum, spirits of camphor, and tincture of rhubarb. Thirty drops for an adult, on a lump of sugar, will often check the diarrhœa.

MIXTURE NO. 2 (FOR VOMITING, PURGING, &C.).—Equal parts of laudanum, tincture of capsicum, tincture of ginger, and tincture of cardamon seeds. Dose, thirty to forty drops, or a half teaspoonful in a little water, and to be increased according to the urgency of the case.

Dr. Ure's Remedy.

Dr. Ure, of Edinburg, states as follows :

I here propose to give a method of treating cholera so simple, so rapid, so certain that it should commend itself to every unprejudiced mind. I assert that it will cure when stimulants, opiates and the vast list of experimental remedies which have been used in this complaint utterly fail. Even when the disease has progressed so far that eminent physicians have given up the case as hopeless, I have seen restoration by this mode take place almost instantaneously. Time—even a few minutes—often decides the fate of a person attacked; therefore speed is a great desideratum, and the treatment here recommended is the quickest on the face of the earth.

In cholera, the serum or watery part of the blood runs off, leaving only the *crassamentum*, or thick portion. This is shown from the fact that the bodies of those who die from the disease, present the extraordinary peculiarity of being without fluid. Nothing remains but the thick parts of the blood—mere clots or coagula in the large vessels, and dark grumous blood in the smaller ones.—The first indication is to stop this enormous hemorrhage. Medicines administered by the mouth cannot meet the case like going directly to the seat of the disease—the bowels. For this purpose use this injection. Its simplicity is such that a child can give it. It is a never failing cure:

Tincture kino, one ounce.

Tincture opii, four drams.

Amylum (common starch), one ounce.

Tepid water, six ounces.

Mix. Inject slowly into the bowels. The injection mixture should be of the consistency of thin gruel. If it should come away it should be immediately repeated. If the injection be properly administered, and in sufficient quantity it will stop the discharge from the bowels in fifteen minutes, and nothing will pass them for several days. The patient is then safe.

A weak mixture of chloroform, spirits camphor and turpentine may also be taken by the mouth. It is the only internal remedy that I have ever seen amount to much.

If the above injection cannot be quickly obtained, a preparation of starch water, containing a solution of alum or laudanum, forms a cheap, convenient and effective injection.

By this treatment, I will pledge all I am worth that I can cure more cases of cholera than all other systems of medicine combined can possibly effect.

Another Remedy.

The following remedy has been highly recommended by those who have proved its efficacy :

Mix in a small bottle equal parts of the tincture of opium (laudanum), tincture of rhubarb, tincture of camphor, and essence of peppermint (treble strength). Add two drams of spirits of aromatic ammonia. Then shake all the ingredients together, cork the bottle, and it is ready for instant use. It will keep for years.

Dose.—Ten drops, twenty drops or a teaspoonful, mixed with a little sugar and water; to be taken every fifteen minutes, thirty minutes, or an hour, according to the severity of the attack and the age of the sufferer.

This compound is pronounced by medical men to be excellent; but it must be remembered that it is a medicine which should be used moderately, although none can be harmed by it if they follow the above directions. A few doses generally relieve the patient. Children require only half the quantity used for grown people.

Another Remedy.

As there is said to be safety in a multitude of counsellors, we give the following additional remedy which has been recommended by many eminent medical men as an excellent remedy, and well worth being kept on hand in every family.

The recipe was used by the Liverpool Dock Company in 1849. It was shown that 127 men of the north works, and 93 men at the dock yards who had been attacked by diarrhoea or cholera, had taken the medicine prescribed, and the whole of them recovered. Ten men at the north works and thirteen at the dock yards, similarly attacked, but who had not taken the medicine, had died. In not a single case had the prescription failed.

Recipe for Diarrhoea and Cholera.—Three drams of spirits of camphor; three drams of laudanum; three drams of oil of turpentine; thirty drops of oil of peppermint.

Mix, and take a teaspoonful in a glass of weak brandy and water for diarrhoea, and a tablespoonful in weak brandy and water for cholera.

Lose no time in sending for medical attendance, when attacked, and inform the doctor of what has been taken.

Headache.

Formerly, I was much troubled with the headache, but for some years past I have been much benefitted by the following practice: Every morning before bathing any other part of my body, I thoroughly wet the back of my head and neck with cold water. I would advise every one who is troubled with a daily headache to adopt this simple practice.

Sick Headache.

This distressing complaint is often caused by over eating. As soon as you feel you have eaten too much, take a walk. If the weather is pleasant go out of doors, but walk even if you have to walk back and forth in your own room. Do not walk very fast at first, but gradually increase in rapidity until you perspire freely. Continue walking fast until there is no feeling of distress about the stomach or lungs. Then cool off gradually, and eat but little at the next two or three meals. Many cases of sick headache arise from the filthy habit of letting the mouth go uncleaned. If you are often troubled with the headache, wash the teeth thoroughly after every meal and scrape the tongue every night and morning. Drink nothing of an alcoholic character, and not eat as much meat as your appetite sometimes seems to crave.— Those who are subject to attacks of the sick headache can usually tell in advance when one is coming on. The head should then be washed in cold water. Be

sure and eat nothing for a few hours, but instead, it would be well to drink a glass of very sour butter milk. If the attack is very severe,

Headache Lotion.

Take half a pint of rose water and two teaspoonfuls of vinegar. Apply it to the part affected whenever the head is aching. Use fresh linen and lotion each application.

Tincture of Blood-Root.

This is made by putting one ounce of the dried, bruised root into one pint of alcohol. Take one teaspoonful every morning, and eat only such food as will easily digest, and only a reasonable amount of that.

I am told that many who have long been subject to the headache, have received help by using this tincture. Over-eating undoubtedly produces many severe headaches, therefore the advice to "eat only a reasonable amount" of easily digested food, is good.

If you will indulge beyond measure in eating, drinking, smoking or other sensual habits, you must suffer with severe sick headache. If you would avoid the headache, avoid the cause that produces it.

Headache Drops.

Take one-fourth ounce of genetian root bruised, one ounce laudanum, one and one-half ounces sulphuric ether, one-half pint alcohol, and half a pint of water. Put all into a bottle and let it stand about a week. Then take a teaspoonful once or twice a day.

I procured this recipe from a female physician in New York. She says this and the tincture of blood-root are particularly useful to females who have the headache in consequence of a weak and debilitated condition.

Hair Restorative.

Take one dram of lac sulphur, one dram of sugar of lead, and four ounces of rose water. Mix well, and shake the vial on using the mixture. Bathe the hair twice a day for a week, then use occasionally. By this means you will restore the natural color of the hair and keep it. To produce a new growth of hair, bathe the bald part once a day. When used simply to beautify the hair, once a week is often enough.

This preparation does not dye the hair but operates on the roots and restores its original color—that is, if your hair was formerly black, this preparation will cause it to grow out and be as black as ever. If your hair was brown, this will cause it to grow that color.

As an article to beautify the hair, this preparation is unsurpassed. In all cases when you apply this to the hair, rub it on to your head with your fingers or a soft brush. It is better to use the fingers and palm of the hand. Rub it in well, for it produces its good effect by working on the roots of the hair. It very seldom fails of producing a new growth of hair, or of restoring gray hair to its original color.—I have seen it used in hundreds of cases and never knew a case in which it was a total failure. The first case I ever knew of its use, was this :

I met a man in Danville, N. Y., who had been using it a short time. I noticed that the ends of his hair were gray, while closer to his head the hair was a dark brown. I took the liberty of asking him the cause, and learned that he had been using this preparation. Since then I have known many similar

cases. The only objection to its use is that it takes time for the hair to grow out new, before you have the original color. Sometimes it makes the hair already on the head look a little darker, but the whole work is not done till it has all grown out new from the roots.

Some, in using this, dye the hair already grown out, and use this preparation, thus avoiding the peculiar appearance of black hair near the head and gray hair further out. The expense of making this is very small, and it is full as good as the best of the advertised Restoratives that have become so popular. It has the advantage of hair Dye in that it does its work from the roots, and hence no new gray hair is continually making its appearance.

Hair Dye.

Take a small lump of lime and reduce it to a fine powder by throwing on a little water. Put on just enough water to slack the lime and leave it to dry. Then take two parts of lime and one of litharge, mix well, and if you desire a black, form into a paste with water. If you desire a brown, form into a paste with milk. Clean the head thoroughly with a fine tooth comb. Then wash the hair with soda and water to free it from grease. Work this paste well into the hair down to the roots and then lay on the paste pretty thick and cover the head with oil-skin or a cabbage leaf, after which go to bed. The next morning the powder should be carefully brushed away and the hair oiled.

Columbian Hair Dye.

No. 1. Hydrosulphuret of ammonia, one ounce; solution of potash, three drams; rain water one ounce (all by measure). Mix and put into a bottle and label No. 1.

No. 2. Nitrate of silver, one dram; rain water, two ounces.—Mix and put into a bottle and label No. 2.

Directions for using.—The solution No. 1 should be applied to the hair with a small brush, (a tooth brush is best,) and the application continued for fifteen or twenty minutes. The solution No. 2 is then to be brushed over, a comb being used to separate the

hairs and allow the liquid to come in contact with every part.— Be careful and not let the liquid come in contact with the skin, as No. 2 produces a very permanent dark stain. If the shade is not dark enough repeat the operation.

Before using the dye, the hair or whiskers should be well cleaned and dried. If you happen to get any stain on the skin wipe it off immediately with a cloth, and then wash the stained place.

One dram of cyanuret of potassium in one ounce of water will remove any stain arising from nitrate of silver. I would not, however, advise you to use it, for it is very poison and if you chance to get it on to any sore place injurious results may follow.

Before putting this dye upon the head, try the effect of it by cutting off a lock of hair and applying the solution as above. If it works satisfactorily on the lock of hair, you may expect it will work the same on your head.

These hair dyes are as good if not better than any other in use. The Columbian Hair Dye was kept a secret for a long time in the hands of a few. The hair dyes formerly in use did not do their work as well as these, but even these are not as reliable as might be wished. However if you try the preparation on a lock of hair before applying it to the head, you need not be disappointed by a total failure. It is far preferable to use the Restorative and thus restore the hair to its original color. The natural color of your hair is the color best suited to your features and complexion. As soon as you exchange the natural color of your hair for some other color, you spoil your own good looks.

Hair Invigorators.

There are many things used to invigorate the hair and give it a lively appearance. Never use any mixture on the hair that contains alcohol.

Take 1 ounce carbonate of ammonia, 20 drops oil of lavender, 1 pint of sweet oil, mix well. Apply daily until the hair stops falling out.

This is very highly recommended by those who have used it.

Strong sage tea used as a daily head-wash is good to prevent the hair from falling out.

Onions rubbed frequently on the bald part of the head have been successfully used to produce a new growth of hair. This is certainly cheap and harmless, but by no means infallible. As it cannot do harm and may do good, if you have a bald place on your head it will be well to try it.

Ten drops of sulphuric acid in a pint of rain water makes a good wash for removing alkaline deposits, which often cause the premature loss of hair.

I got the above recipe of a traveling agent who was selling one of the much advertised hair restoratives. He said that the success of the restorative depended on the above wash being used previous to the application of the restorative. I have no doubt that one great cause of the head becoming bald is that it is not sufficiently cleaned. Everybody's head needs washing as often and as thoroughly as their body. Any one who washes his head thoroughly with soft water every day, and with soap and water once a week, will need no shampooing, but for the benefit of those who have long neglected keeping the head clean, I give the following:

Shampooing Mixture.

Mix 1 ounce of purified carbonate of potash in 1 quart of rain water.

Directions for using.—Wet the hair with the mixture and rub it thoroughly with both hands. Then wash the head with clean soft water, after which it should be wiped dry with a coarse towel. When perfectly dry put on a little oil. It is not best to use much oil on the hair at any time.

I have known this recipe to be sold for five dollars. The mixture costs but a trifle, and hence is very profitable to barbers.

Ox Marrow Pomatum.

Take 2 ounces of yellow wax, 8 ounces of beef marrow, and 12 ounces of lard. Melt all together, and when sufficiently cooled perfume with oil of almonds.

This is one of the best pomatums in use, and if you must use pomatum you may rely upon this as being excellent.

Shampooing Compound and Grease Extractor.

Take 1 ounce of shaving soap and whittle it into thin shavings, and then put it into a quart of soft water. Let it stand a few hours, shaking it up occasionally to give the soap a chance to dissolve. Then add 2 ounces of aqua ammonia, and 1 teaspoonful of saltpetre. The whole should be put together in a glass bottle and corked. Let it stand about a week before using, and shake it up a few times, say once a day.

Directions.—For shampooing use in the usual way. For removing grease, oil, or stains from any kind of clothing, put some of it on the place and let it be a few minutes. Then rub it well and sponge it. Then wash it off with clean cold water. If the grease is not all removed repeat the operation.

I bought this recipe of a barber in Detroit, Mich. He recommended it more than I should feel authorized to. The following is the substance of what he said about it: It will remove any stain or paint in which there is any grease or oil. It cannot injure the finest fabric. In shampooing, if there is much grease and dandruff in the hair it raises all the more lather. Besides all this, it is sure death to bed-bugs.

Put it into the crevices and places where they like to live, and it will entirely destroy them. It is first rate for cleaning dirty wood work, such as doors that are frequently opened and shut with greasy hands. Wet a cloth with it and rub the greasy places, but do not use it where there is any paint that you do not wish removed.

Rose Hair Oil.

Put 10 drops of otto of roses in 1 pint of olive oil.

Otto of roses is rather expensive, and for that reason seldom used. Much of the rose hair oil sold is made of olive oil and a few drops of essence of bergamot.

Superfluous Hair.

There is no remedy for the removal of superfluous hair that is in all cases perfectly harmless, but as we sometimes find hair existing on parts of the face or body where it ought not to grow, it is perfectly natural for us to wish we could get rid of the extra growth. Let it be understood that each hair in growing through the skin carries with it a transparent sheath. Within this sheath there is a passage for the growing fluid to flow out and in. This being the case, the true way to eradicate the hair is to destroy this passage or minute canal which conveys the nutrient liquids to the stems. This it is very difficult to do without injuring the skin. The following is the simplest remedy I know anything about:

Beat 4 ounces of sweet almonds in a mortar and add $\frac{1}{2}$ half an ounce of white sugar during the process. Reduce the whole to a paste by pounding. Then add, in small quantities at a time, 2 ounces of rose water and continue the pounding or trituration in the mortar. Then add in the same manner 1 ounce of the alkaloid extract of colchicum. This emulsion should be strained through a fine cloth, and the residue pounded again. The strained fluid should be bottled in a large vial and corked. After pounding and rubbing the residue in the mortar, strain out what fluid you can, and continue doing so as long as you can strain out any fluid after pounding. Then add to the strained fluid $\frac{1}{4}$ a pint of very strong vinegar, and after shaking it well, it is ready for use.

This fluid is to be applied with a cloth immediately after washing. The skin should then be gently rubbed with a dry cloth till perfectly dry.

There are many other preparations sold for a high price, but this is probably the most harmless one among them. It needs considerable time and a number of applications to remove the extra tufts of hair.

My own opinion is that the only really safe way is to remove the superfluous hair by pulling it out. A pair of good tweezers and plenty of patience will do the work.

Hair Wash.

Here is a Hair Wash that has been used by some of the best barbers in the country and for a long time was kept a secret and the recipe sold for \$5. — Try it.

Bay rum, 1 gill; alcohol, 1 gill; aqua ammonia, 1 ounce; sugar of lead, 1 ounce; lac sulphur, 1 ounce; nitrate of silver, 1 ounce; fine table salt, 1 tablespoonful; soft water, 2 pints. Set away for 12 hours; strain and perfume according to your taste.

Hair Oil.

Some people think it necessary to have an oil for hair dressing purposes, always among their toilet fixings. The following is a simple and cheap prep-

aration, and is as good as most of the cosmetics for the hair that are sold by the druggists.

2 parts castor oil; 1 part alcohol. Mix and perfume to taste.

Here is another more elaborate preparation that has been sold for five dollars for a single recipe, styled the

Hungarian Hair Oil.

Take 4 ounces each of strong alcohol and castor oil; tincture of red sanders or alkanet $\frac{1}{2}$ ounce; oil bergamot, oil lavender, oil lemon, of each 1 dram. Mix thoroughly and bottle.

Hair Pomatum.

Take the marrow out of two beef-bones, put it in cold water and let it remain until it is quite clean and white, change the water several times, dissolve and strain the marrow; then add 4 ounces of the best castor oil, beat both well together until cold, then add, before the pomatum becomes firm, $\frac{1}{2}$ an ounce of strong scent, as desired.

The above will be found to be a very excellent hair dressing, and costs but little beside the trouble of making it.

To Prevent Hair from Falling Out.

There are few people who like to present to their friends a bald shining pate, and it is seldom necessary that they should, if they take the necessary steps in time to save their hair. The following when applied in time will almost always prevent the hair from falling off:

Take 1 pint of Cologne, 2 ounces tincture of blood root, 2 ounces castor oil, $\frac{1}{2}$ an ounce tincture of Spanish fly, and $\frac{1}{2}$ an ounce of castile soap, grated fine. Mix thoroughly. Apply once a day with a brush.

Hair Brushes, to Clean.

Those who use hair brushes should take especial pains to keep them clean, and as hot water and soap soon destroys the hairs by softening them, something else should be used. Try the following :

Dissolve some soda in cold water. As soda has an affinity for grease, it cleans the brush with little friction. Brushes should never be set in the sun or near the fire to dry. After they have been washed, give them a good shaking in order to get out all the water you can. Then set them up on the point of the handle in a shady place and let them alone until they are dry.

Magic Toothache Drops.

Mix together equal parts of laudanum, tincture of myrrh, spirit of camphor and oil of cloves. Apply to the affected tooth on a little lint.

I do not pretend that these drops will wholly cure the toothache in every case, but they will always give relief and in most cases entirely cure in less than five minutes. Either of the ingredients alone is good, but the best way is to mix them as above. I never heard of this recipe until I tried it myself. I know of no better remedy for the toothache. I have had occasion to use them a great many times, and always with good success.

There are many simple remedies, such as putting saleratus in and around the tooth. When all the other remedies fail, try these drops. Though if your tooth is aching very hard, you had better try these drops first and you will have no need of trying the other remedies.

Tooth Powder.

Take prepared chalk 2 ounces, Peruvian bark $\frac{1}{2}$ ounce, and 1 ounce of white sugar. Put all together and triturate in a mortar.

42 Chilblain Lotion. Secret Art of Catching Fish.

This makes a cheap powder, and I know by actual trial that it is better than many of the powders sold at high prices. It cleans the teeth, hardens the gums and sweetens the breath.

Chilblain Lotion.

Mix 2 ounces of sal ammoniac with a pint of water. Bathe the feet at night before going to bed. The feet should be washed clean before using the lotion.

I have known this used in many cases with good success. It is said to be a sure cure, but I could not say positively that it will never fail. As it is simple and cheap you can try it for yourself.

The following is my plan of curing chilblains, and I have had no failures though I have had occasion to try it many times, and on many different persons:

Wash the feet thoroughly with cold soft water every night before going to bed, and wipe them as dry as you can with a towel. Then warm them well before the fire and rub them with the hands at the same time. If they are very sore rub them gently. I think this is a better way than to use lotions.

Secret Art of Catching Fish.

Take 1 dram oil of rhodium, 1 ounce of coculus Indicus, and 1 pound of cheese. Mix and throw into the water in small crumbs. In a few minutes you can take the fish out with your hands. You will have to work lively as this only stupefies the fish for a short time. If you do not gather them in they will soon swim away and leave you. Have a large pail or tub of water in readiness, and when you get the fish put them into the water and leave them until they are lively before you dress them.

When fishing with a hook put oil of rhodium on the bait and you will always have good luck. I am told that the juice of smellage mixed with the bait answers the same purpose as oil of rhodium. As long as there are any fish within a few yards of your hook, you can keep yourself busy pulling them out.

I am not a fisherman, and know nothing about this "great secret" only that I have sold it on trial

to be paid for in case it worked well, and those who tried it paid me, declaring it worked to a charm.

Substitute for Sweet Cider.

Dissolve $\frac{1}{2}$ an ounce of tartaric acid, 1 pound of brown sugar, and 2 tablespoonsful of yeast in 1 gallon of warm water. Let it stand until sufficiently fermented, which will usually be in about 12 hours. In making this cider you can vary the proportion to suit the taste. A larger proportion of water is usually put in with the above ingredients; you can add as much as suits your taste. This cider when sour, makes the very best of vinegar. If you make it in cold weather, keep it in a warm room until fit for use.

This is nearly as good as the genuine apple juice, not one in ten being able to tell the difference. It has one advantage over apple cider, and that is it is not intoxicating.

This recipe has been sold under different names at great prices. It is called "Western Cider," "Cider without Apples," "White Oak Cider," and various other names. You may have to vary the proportions considerably before you make it to suit your taste. If you want it sweeter put in more sugar. If you want it more tart put in more acid. There is no necessity of using a recipe for keeping cider sweet when you can make a substitute cheaper than you can prepare the genuine.

To Transfer Pictures from Paper to Wood.

Varnish the wood with copal; when about half dry, lay the face of the picture on the varnish, and press it down carefully. When thoroughly dry, moisten the back of the paper with water and rub off gradually, till you can distinctly see the picture, but take care and not rub clear through the paper. Get the paper as even as you can, and when dry smooth it off with a piece of fine sand paper; then give a good coat of varnish, and when dry you will have the exact picture that was on the paper, with not enough of the paper left to be noticed.

This is so simple that even a child can do it. It requires no knowledge of painting. I have known children under ten years in Kenosha and Racine to successfully transfer pictures according to this recipe. By following the above directions you can transfer pictures from paper to wood, glass, stone, or any smooth, hard surface. If you have a fine picture you wish to put on to a piece of nice furniture, you can easily do it. If you wish to transfer a picture on to glass get a common window glass, clear and free from spots. Clean the glass thoroughly before applying the varnish. After varnishing put the glass away where no dust can get on it, and let it dry thoroughly. In transferring to glass you will have to be more careful than in transferring to wood. In all cases after the picture is transferred and well dried, varnish it.

Wart and Corn Salve.

Pulverize 1 ounce of potash in an iron kettle; let it stand in the open air 24 hours; then add 25 grains extract of belladonna, and 1 dram peroxide of magnesia; mix well and add enough water to bring it to the consistency of honey. Put a little of this on the corn and let it remain about an hour. Then wash it off, and soak the corn in sweet oil; if it causes pain before the salve has been on an hour, it should be immediately washed off. After soaking the corn in sweet oil, scrape off what you can of the dead substance, and if you can pull the corn out, do so. If one application is not sufficient, go through the same process again the next day. Usually one or two applications will be enough. Warts may be removed in the same way. This salve should be used soon after being made, for it becomes useless in a few weeks if kept.

As I never had a corn I never have had occasion to try the above on my own flesh, but before I concluded to publish my recipes in a book, I used to

sell the above and give the purchaser a chance to try it before paying, on condition that if it removed the corn I was to have my pay ; but if it failed, I was not to get anything. I have received more than a hundred letters saying that it did its work well. I have received one and only one saying it was a failure.

Black Writing Ink.

Put 1 pound of logwood chips in 1 gallon of soft water. Boil slightly one hour. Then strain and add 25 grains bichromate of potash, 12 grains prussiate of potash, and $\frac{1}{4}$ ounce of prussian blue. Put the whole over the fire, and boil about five minutes. Strain again. Let it stand open a week or two, after which it may be bottled for use.

One inch of the stick of nitrate of silver to each gallon of the above, makes a first rate Indellible Ink for writing on cloth.

Many consider this the best ink ever invented.— It is a bright jet black, flows easily from the pen, does not corrode, and cannot be effaced, even by the strongest oxalic acid. When the ingredients are purchased in small quantities it will cost about five cents a quart. By buying at wholesale it can be made for half that price. Freezing injures this ink less than any other ink I have ever seen frozen.

Invisible Ink.

Take 1 part of sulphuric acid and 15 parts of water: mix and write with a quill or gold pen. On white paper, no mark can be seen until held to the fire, when it becomes very black. On blue paper it makes a white mark.

This is useful only as a curiosity. Simple and useless as it is, I have known the recipe to be sold for ten dollars.

Stimulating Onguent.

Mix 2 drams tincture of cantharides, 12 drops oil of nutmeg, and 2 ounces of cologne in half a pint of rose-water. Apply every night and shave three times a week.

I warrant this as good, but not better, than the article so extensively advertised, and sold under the recommendation that it will force whiskers to grow in six weeks.

Silver Humbug.

Nitric acid 1 ounce, quicksilver 1 ounce, and rain water 1 quart. Put all in an open bottle and let it stand until well dissolved.—Wet a piece of woolen cloth with this, and rub it over whatever you wish to clean. Then rub briskly with a piece of dry woolen. When first applied it makes brass, copper, &c., look like silver, but in a few days it assumes its original color.

This is the only really useful humbug I know anything about. For cleaning silver, brass and copper it is unsurpassed. I have named it humbug because I have seen so many humbugged with it. Many on seeing it applied to brass suppose the silver is permanent, and therefore pay a high price for the article and a higher price for the recipe.

Balky Horses.

Take the scab from the fore leg of the horse and pulverize it very fine. Then add some finely pulverized sassafras root and mix with fresh lard. Fasten to the bit with a cloth. Dampen a little of the pulverized scab with oil of rhodium and oil of cummin, and with your finger rub a little of it in the nostrils of the horse. Let him stand a few minutes and start him gently, and you will find he is ready to pull all he can.

While I was traveling in the oil regions of Pennsylvania, I met a teamster by the name of John C. Young, trying to make his team pull an empty wagon over a good road, but one of his horses was balky and would not pull. I happened to have some of the

preparation with me, and told him I could make his horse pull. He was quite willing to let me try, and I used the preparation according to the above recipe. The horse soon forgot to balk. The teamster then bought the recipe of me and gave me a recommendation which enabled me to sell the same recipe to many others who were troubled to make their balky horses pull. Whether this will always work successfully or not is more than I can say, but I have never known it to fail though my acquaintance with its use is not very extensive.

Transparent Soap.

Take 1 pound of white bar soap, 1 pint of alcohol, $\frac{1}{2}$ ounce of spirits of hartshorn, and a few drops of oil of cinnamon. Cut the soap into small pieces. Put all the material together into a clean kettle, and place over a slow fire. Stir gently till all is dissolved; then pour it into a square pan, and when cold you can cut it into bars.

This soap is very highly recommended for removing oil, paint, grease, and stains from all kinds of cloth.

London Washing Compound.

Among the many labor saving inventions, there is probably none that will compare with the London Washing compound. It will save more rubbing to the tired and weary washerwoman than any washing machine ever invented. It has long been used and appreciated in England, and is undoubtedly the best preparation of the kind ever sold in the United States.

The recipe was first sold for ten dollars and after-

wards for five, and we presume thousands of persons have paid from one to three dollars each for the recipe within the past year. In giving it to the purchasers of this book we believe we give them the full cost of the book in this one recipe. The preparation is also manufactured and sold extensively under different names.

It will make clothes look whiter without rubbing than any washing machine, and as the cost is trifling it cannot fail to give satisfaction to whoever tries it.

Take 5 pounds sal soda, 1 pound borax, 1 pound fresh unslacked lime. Dissolve the soda and borax in 1 gallon of boiling water, and slack the lime in a like quantity of boiling water. Then pour them both into 8 gallons of water, stir a few times and let it stand till morning, when the clear fluid should be drawn off and kept ready for use. Any quantity can be made after this proportion.

One quart of this compound, with 3 pounds of good brown soap cut fine, and 2 pounds of sal soda, boiled in 3 gallons of water for ten minutes, will give you four gallons of splendid soft soap.

Directions for use.—The night previous to washing assort the clothes and put them in a tub, the cleanest ones top, and pour cold water over them. In the morning fill the boiler half full of soft water, put in half a teacupful of soft soap, and one teacupful of the compound. Wring out the cleanest of the clothes and put in and boil five minutes; take out, and boil the remainder the same. Pour out the suds and put in clean water, with one spoonful of soap and two-thirds of a cupful of compound. Wring out the clothes as before, rubbing the wristbands and dirty spots a little. Boil ten minutes, take out, suds, rinse and dry.

For colored clothes, put the first boiling water in a tub and when cool enough to bear the hand in, put them all in and let them stand until ready to be washed—they will not fade. Then wash in the usual manner, only use less soap.

Washing Fluid.

Dissolve half an ounce of camphor gum in a pint of warm water, and add a pint of strong lye and half an ounce of aqua ammonia. Put the whole in a glass bottle, and keep it well corked.—In using this liquid the clothes intended to be washed should be soaked as follows: Fill a tub with clothes, take water enough to cover them well, and stir in one ounce of this liquid. Soak the clothes in this water ten or twelve hours—say over night. In this way you will avoid at least half the rubbing.

I think the above recipe has never before been published in a book, and I therefore give it a place here so that if it is really good it can be used. I have never seen it sufficiently tested but think it is a good one. As this is made without lime, sal soda, spirits of turpentine, alcohol or anything that will injure the finest fabric, and as it is simple and cheap there can be no harm in giving it at least one trial. The great probability is that you will continue to use it if you try it once.

Starch Polish.

Take enough common starch to make 1 pint of starch when boiled. When boiling, add $\frac{1}{2}$ a dram of white wax, and $\frac{1}{8}$ a dram of spermaceti. Use as common starch, only have the iron hotter than usual.

This will enable the most ordinary ironer to give linen the appearance of having just left the hands of the most experienced finisher, full as beautiful as when it was new.

Substitute for Apple Butter.

Take 1 quart of vinegar and 1 quart of molasses; boil 15 or 20 minutes, and add 6 tablespoonfuls of wheat flour in warm water. Boil all ten minutes longer, and flavor with mace, cinnamon or lemon to suit the taste. This makes a very good substitute for apple butter.

I procured this recipe of a man in the central part of Ohio. He had just paid five dollars for it, and considered it cheap even at that price. I have eaten the substitute, and think it certainly is a good imitation. You will see it takes only a few minutes to make it, and the articles of which it is made are in common use in every family. It is probably the

cheapest sauce you can get. Apple butter is in common use in many parts of the country. When fruit is not plenty it is quite expensive. This substitute will answer every purpose of the genuine article.

Rheumatic Liniment.

Alcohol 1 quart, oil of wormwood 1 ounce, pulverized capsicum 1 ounce, camphor gum 1 ounce, and 1 ounce of oil of origanum. Put all into a glass bottle, keep it well corked, and shake it up once or twice a day for a week. Apply to the part affected, and rub it in for at least 15 minutes each time. The best way is to rub part of the time with the hand and part of the time with a piece of flannel.

Consumption.

Consumption is usually believed to be an incurable disease ; yet I have known many persons restored to health after they had been pronounced "just ready to die with consumption." It is estimated that this disease carries off at least one-sixth of the population of this country. Hundreds of nostrums are extensively advertised and sold as new discoveries and sure to cure. The quack remedies so often fail that many really suppose the disease incurable.

Some of our most able medical writers declare that consumption is a curable disease, and there is not the least question in my mind that they are correct.— But something more should be done than simply to allay the cough. This of course should be attended to, but this is not half the work. Here are a few recipes for making some of the remedies very highly recommended and fully as good as the nostrums so extensively advertised and sold.

Take 1 peck of tamarack bark (brush the moss off but do not ross it), $\frac{1}{4}$ pound of dried spikenard root, and 3 ounces of hops. Put all together in about 10 quarts of water, and boil enough to get the strength. Then strain and boil down till there is only about 1 gallon. Before it gets fairly cold sweeten it sufficiently with brown sugar or honey,—honey is best. Then add 1 quart of alcohol, and bottle. It should be kept corked and in a cool place. Take a swallow or two before each meal and before going to bed.

Cough Syrup.

Take equal parts of boneset, slippery elm bark and stick licorice. Put into 1 quart of water, and simmer till the strength is extracted from the ingredients. Then strain and sweeten with loaf sugar. One tablespoonful is a dose to be taken as occasion requires.

This medicine is not only cheap but safe. It will alleviate the most distressing cough, and hence in consumption is a valuable remedy. But consumption is not the only case where it may be used to advantage. It is good for whooping cough, croup, bronchitis, diphtheria, and all diseases of the throat and lungs. It should be kept bottled tight. Let this syrup be nicely put up, and as extensively advertised as some of the nostrums which are not half as good but really dangerous, and it would justly become more popular, and do more good without the danger of doing mischief. Another simple cough syrup, cheap and good, is made as follows:

Take equal parts of slippery elm bark, elecampane root, and blood-root. Prepare and use as above.

Another Cough Syrup.

Dissolve 2 sticks of common black licorice, 4 ounces of white sugar, and 1 ounce of gum arabic in $\frac{1}{2}$ a pint of warm water.—Then add $\frac{1}{2}$ an ounce of paregoric and 1 ounce of antimonial wine. Take a small swallow of this any time when the cough troubles you.

Cold and Cough Balsam.

One ounce black cherry bark, 1 ounce squills, 1 ounce seneca snake root, $\frac{1}{4}$ ounce bloodroot. Put into 3 pints of warm water, steep 4 hours, then strain. Add $\frac{1}{4}$ pound loaf sugar, then steep down to $\frac{1}{2}$ pint and bottle.

Directions for using.—For adults, a large teaspoonful three or four times a day, to be increased or diminished as the case may require.

The above is really an excellent remedy, and one that has been used in thousands of cases with the most complete success. The formula was long sold at prices varying at different times from three dollars to one dollar. It cost us one dollar. If you are troubled with a cold or cough, or any other lung complaint, don't fail to try it.

Cough Drops for Children.

Mix in a bottle equal parts of syrup of ipecacuanha, paregoric, and castor oil. Shake well before using. Let the child swallow a few drops, but do not wash it down with other liquid.

This has been in common use for years and is considered safe, but it is not as reliable as the syrups given above.

A slight irritation of the throat may be relieved by sipping a little tea made of slippery elm. Another method is to take a small piece of gum arabic and by letting it dissolve in the mouth swallow a little at a time. This forms a coating over the mucous membrane and thus prevents the irritation of the air.

Hints to Consumptives.

I might give many more recipes for curing consumption, but these are as good as any and therefore I consider it unnecessary to give more. But I have

some remarks to make and directions to give which will be beneficial to consumptives to heed.

In the first place I would say, pay no attention to the advertised nostrums, but if you think you need any medicine to relieve your cough, use some of the above mentioned preparations or some other simple remedy. Many of the articles commonly used to cure consumption are positively injurious, and for that reason should be avoided. I have given only such as are simple and harmless.

If you find that you "take cold" very easily, you may put it down as a strong mark of beginning consumption. The usual symptoms of consumption are too well known to need repeating here. I do not pretend that every case of consumption can be cured, but most cases are as curable as any other disease. Having myself been troubled with weak lungs and by many supposed to be consumptive, I have been led to closely scrutinize this disease. Instead of taking medicine I think it is much better to observe the following hints:

Wear loose clothing; sit, stand and walk erect with the shoulders thrown back; be cheerful and in no case give way to despondency; eat and sleep at regular hours, and be regular in all your habits.

Make a practice of taking long breaths. Inhale as much air as you can and hold it in the chest as long as possible. Do this frequently every day, but

be sure you breathe pure air, and if cold, all the better. Keep the mouth closed so as to breathe through the nose. Never sleep in rooms much heated by fire, but it is far better to have a little fire than to sleep in damp rooms.

Exercise freely in the open air. Out-door exercise when the sun shines is very valuable; but not in the middle of the day when it is very hot. The rays of the sun should be freely admitted into all rooms in which we spend any considerable time.

Eat freely of ripe fruit. Do not sit up very late at night if you can avoid it, but if anything happens to keep you up beyond the usual hour, be sure and rest enough the next day to make up for what you lost. Coffee is said to be very injurious. My opinion is that neither tea nor coffee should be used, but coffee is evidently much worse than tea.

Keep the teeth and mouth clean. The teeth should be thoroughly washed at least once every day. Rinse the mouth frequently with cold water. The skin should also be kept clean, and the whole surface of the body should be frequently bathed at all seasons of the year. Use warm or cold water, just which suits you best, but in all cases wipe thoroughly dry, and rub the whole surface with the hands. Bathe at least once a week and oftener if thought best.

If you walk or leave the house before breakfast, eat a cracker or crust of bread before you start. If

you walk before sunrise be careful to avoid low, damp, and marshy situations. Never go out in such places till the sun has been shining at least an hour. Low and marshy places should be avoided after sundown.

It is recommended by some to eat a little sugar each day. Others think no sugar should be used at all. I think that a small quantity of sugar eaten each day will do good. No doubt it would be injurious to use it in large quantities. Severe and long continued exercise of body or mind should be avoided, though it is well to work lively for a short time. As soon as you begin to feel much fatigue, it is time to stop and rest. Regular gymnastic exercises every day will be of service if not carried to excess.

Make yourself as thoroughly acquainted as possible with the disease, in order the better to know how to combat it. Wear flannel next to the skin at all seasons of the year. If you are able to travel and deem it necessary to leave home, go north instead of south.

Attend to these directions and you will find it much better than taking medicine.

Collodion.

Take gun cotton and dissolve it in sulphuric ether; thicken it with gum mucilage.

This article touched upon a cut or bruise, immediately forms an artificial skin which cannot be wash-

ed off. It is very useful for mechanics and others whose business makes them liable to cut or bruise their hands. It obviates the necessity of finger cots, bandages, plasters &c. Where this is used not even a rag is necessary to do up a slight wound. The expense of making this collodion is small, and many have made considerable money selling it. It is usually put up in ounce vials and sold at fifty cents, but the cost of it would warrant the maker in selling it at fifteen instead of fifty cents. It is really useful and well therefore to have some always with you to use in case of necessity. It has been sold under various names. I have known the recipe sold for ten dollars.

Blue Ink.

Take soft prussian blue and oxalic acid in equal parts. Rub them together in a mortar until they are well powdered. Put in enough soft water to bring it to a thin paste. Let it stand about a week, then add more water. You can thus bring it to any desired shade of color you please. If you want it a very light blue add considerable water, otherwise add but little.

Red Ink.

Take best carmine 2 grains, rain water $\frac{1}{2}$ ounce, aqua ammonia 20 drops.

This is said to be the best ruling ink ever made, and hence much used for ledgers and bank purposes. I have never made any of it myself, but have sold the recipe to others who have made it and pronounced it the very best.

Indellible Ink.

Take $\frac{1}{2}$ an ounce of vermilion and a dram of salt of steel.—Powder them very fine and put in linseed oil until it is the consistency required.

This ink can be used with type, hair pencil or pen. If you wish to use it with type it needs to be much thicker than when used with a pen. You can vary the color by putting different articles with the above. It is said to resist the action of all acids or alkalies.

A little nitrate of silver dissolved and stirred into other ink is as indelible as could be wished. Soft soap and boiling cannot efface it. Indellible ink should always be kept corked in a glass bottle.

Indellible Ink for Cloth.

Take soft water 2 ounces, nitrate of silver 4 drams, spirits of hartshorn 2 drams. Mix thoroughly, then add 2 drams sap green, grated fine. Bottle tight, and use with a quill pen.

This makes one of the most permanent and jet black indelible inks ever made. Cloth marked with this should be exposed to the strong heat of the sun half an hour, or a warm iron may be run over it.

Superior Black Writing Ink.

Take powdered nutgalls 4 ounces, cold rain water 5 teacupful. Mix and bottle. Shake them once a day for three weeks, then strain through a flannel cloth.

This forms the best and most durable black ink in use. It never fades or becomes mouldy. This ink should never be boiled, as heat destroys the coloring principle and renders it transient and pale.

Silver Plating Fluid.

Dissolve 1 ounce of nitrate of silver in crystals in 20 ounces of soft water. Then dissolve in the water 2 ounces of cyanuret of potash. Shake the whole together and let it stand until it becomes clear. Have ready some small bottles half full of Paris white, or fine whiting. Then fill the bottles with the liquid and it is ready for use. The silver should be obtained in crystal because its purity is more certain.

I have never used this recipe and cannot speak of its merits from experience, but I know it has often been sold for a high price.

Genuine Hot Drops.

Take $\frac{3}{4}$ of a pound of fine gum myrrh. 1 ounce best African cayenne, and 4 ounces golden seal. Put the whole in 1 gallon of alcohol and let it remain 1 month, shaking it thoroughly once a day.

The above is the genuine article and may be taken by the teaspoonful for a dose in a little water well sweetened. It is very valuable in coughs, colds, pains in the stomach, bowels, &c. In case of rheumatism, bathe the part affected with the drops and rub freely with a piece of flannel or the bare hand. It is also excellent for the headache and toothache if applied to the affected part. Those subject to cold feet will find a help by washing the feet in cold water and then bathing them well with these drops.

Matches.

The ends of the tapers of wood should be very dry and then dipped into hot melted sulphur, and laid aside to dry. Then dissolve 4 parts of glue, and when hot add 1 part of phosphorus, and stir in a few spoonful of fine whiting to bring it to the proper thickness.

This preparation should be kept hot by being suspended over a lamp while dipping the tapers. Color the ends of the matches by adding a little vermilion, prussian blue or lamp-black to the mass. Be careful and not ignite the compound while dipping.

Always keep matches in their case and you will avoid the danger of fire consequent upon letting them be carelessly scattered about. Every bedroom should be supplied with a match-safe well filled with good matches. Never leave matches where children can get hold of them.

French Chemical Soap.

Take 5 pounds of castile or white bar soap cut fine, 1 pint of alcohol, 1 pint of soft water, 2 ounces aquafortis, $\frac{1}{2}$ an ounce of lamp-black, 2 ounces saltpetre, 3 ounces potash, 1 ounce of camphor and 4 ounces cinnamon in powder.

First dissolve the soap, potash and saltpetre by boiling. Add all the other articles, and continue to stir till it cools. Then pour it into a box and let it stand 24 hours, after which it may be cut into cakes.

This undoubtedly makes a good soap, but it is not as cheap as some of the other recipes given in this book will make.

Shaving Soap.

Take 2 pounds of best white bar soap and $\frac{1}{2}$ a pound of good common bar soap, and scrape them up fine so that they will dissolve readily. Put the soap into a copper kettle with a quart of soft water, or as little water as it can be dissolved in without burning. Set it over the fire and when it is dissolved by boiling add 1 pint of alcohol, 1 gill of beef's gall, $\frac{1}{2}$ a gill of spirits of turpentine. Boil all these together for five minutes and stir well while boiling. While it is cooling flavor it with sassafras or some other oil to suit, and color with fine vermilion. After you put the vermilion in stir it only a little in order that it may be colored in streaks. Too much stirring would not give it a variegated color. If you put in much vermilion it will make it more than usually red.

This soap makes a rich lather and can be made at a reasonable expense. Those who have used it claim that it makes the face appear smooth and clear.

Shaving Oil.

Put 1 pound of soft soap into a jar and add 1 quart of high proof cologne spirits. Set the jar in a vessel of boiling water until the soap is dissolved. Perfume with any essential oil to suit.

For those troubled with pimples this is a good article for shaving. It softens the skin and cures the humors. Two or three drops is enough for shaving. Rub it on the face with the fingers; then dip the end of the brush in hot water and brush the face briskly and it will raise a rich lather.

Turkish Rouge.

Take $\frac{1}{4}$ a pound of best Brazil wood, fine and of a golden red color, infuse 4 days in a quart of best wine vinegar. Boil them together for $\frac{1}{4}$ an hour, strain through a fine cloth and place the liquid over the fire. Having in the meantime dissolved 4 ounces of alum in a pint of white wine vinegar, mix the two liquids and stir them together. The scum which now arises should be taken off and gradually dried and powdered.

I would not recommend any lady to use rouge or paint the face, but have given the above for the benefit of those who are bound to have some artificial help to beautify the complexion. Here is something else much cheaper than the above :

Infuse 1 ounce of alkernet in a pint of cologne spirits until it comes to the right shade of color.

This may be applied to the cheeks with a linen cloth wet in the mixture. It will easily wash off and cannot be detected on the face, which is one thing greatly in its favor.

Freckle Lotion.

Take $\frac{1}{2}$ a pound of clean ox gall, $\frac{1}{2}$ a dram of camphor, $\frac{1}{2}$ a dram of burned alum, 1 dram of borax, $\frac{1}{2}$ an ounce of rock salt, and $\frac{1}{2}$ an ounce of rock candy. This should be mixed and shaken well several times a day for a month, or until the gall becomes transparent. Then strain it carefully through filtering paper.—Apply it to the skin once a day and let it remain on about three hours, then wash it off and rub the skin with a towel first and then with the hand.

Great care should be used in making this article. If made properly it will not fail of its purpose. It removes tan and cures sun burned face and hands.

If some energetic man would take hold of this, make up a lot of it, and advertise it as extensively as some patent medicines are advertised, he might sell a large quantity. As there are many who wish

to remove their freckles and many who have tanned skin, it would sell readily and command a good price.

A Wash for the Face.

A few years since a learned chemist and physician gave me a recipe for making a harmless, useful and cheap wash for the skin. Many fair daughters may be pleased to make so desirable an addition to their toilet.

A piece of gum tolu the size of a walnut thrown into a wash bowl of soft water, half an hour before using, will soften the skin, and after a few applications, will remove, to a great extent, tan, freckles and roughness. The tolu imparts to the water an agreeable aromatic odor. Ten cents worth of this, with a cake of fine soap freely used, will be more effectual in beautifying a young lady's complexion than many costly and injurious cosmetics.

The tolu may be kept in a china cup, and when used, the cup can be placed in the bowl of water, thus avoiding the trouble of removing the gum.

Extract of Vanilla.

This beautiful flavor is made by taking a quart of pure French brandy, cutting up fine 1 ounce of vanilla beans, and 2 ounces of Tongva bruised. Add these to the brandy, and let it digest for 2 weeks, frequently shaking. Then filter carefully and it is ready for use.

This article is in great demand for flavoring pies, cakes, puddings, &c. As it sells readily at a good price much money may be made by manufacturing and selling it.

Transparent Crockery Cement.

Take 1 pound of white shellac, pulverized, and 2 ounces of clean gum mastic. Put these into a bottle and add $\frac{1}{2}$ a pound of pure sulphuric ether. Let it stand half an hour and then add $\frac{1}{2}$ a gallon of 90 per cent. alcohol. Shake occasionally until it is dissolved. Heat the articles to be mended by holding the edges in or near the blaze of a lamp or candle. Apply the cement with a pencil brush, and hold the articles firmly together until the cement cools.

Liquid Cement.

Cut gum shellac in 90 per cent. alcohol; put in vials and it is ready for use. Apply it to the edge of the broken dish with a feather, and hold it as long as the cement will simmer in the blaze of a spirit lamp, then join together even, and hold it until cold.

The dish will break in any other place first, and is as strong as when new.

Cheap and Useful Cement.

Dissolve common salt in water—as much as the water will take up—and then thicken it with clean ashes till it becomes a mortar of temper for working. This will harden in a short time to firm cement.

The above will be found useful to stop cracks in chimneys and stoves, the insertion of stove pipes, open joints in pipes, and all places of the kind.

Soldering Fluid.

Mr. F. Oakley furnishes the following recipe for a soldering fluid which he says he has used for many years, always with success. It is endorsed by the first scientific men of the country:

Two ounces muriatic acid, in which as much zinc is dissolved as it will hold, to which add $\frac{1}{2}$ an ounce of sal ammoniac. Clean the metal well and the solder will run and adhere to any part of the metal to which the solution is applied. It will also solder brass and steel together.

Oil Paste Blacking.

Take 2 ounces of oil of vitriol, 5 ounces of tanners' oil, 1 pound of ivory-black, and 4 ounces of common sale molasses. Mix the vitriol and oil together and let it stand 2 or 3 days. Then add the ivory-black and molasses and stir the whole well together. Let it stand about a week and it is ready for use.

This blacking is said to be superior to the other blackings in use, but as it contains vitriol some may prefer not to use it, although I think it will not injure leather as much as many of the blackings in common use.

Premium Blacking.

Take of ivory black and treacle, each 12 ounces, spermaceti oil four ounces, white wine vinegar, four pints, mix.

This Blacking has been recommended by scientific Lecturers and Professors. It gives leather a fine polish, and is better than almost any of the Blackings now in use, as they all contain sulphuric acid, (oil of vitriol), while this contains nothing injurious to the leather.

Leather Varnish.

To 1 quart of strong alcohol add $\frac{1}{2}$ pound of gum shellac, 1 oz. resin, and $\frac{1}{4}$ oz. camphor. Set in a warm place with frequent stirring for several days, or until all is dissolved; then add 2 oz. lamp black mixed with a little alcohol,—and it is ready for use, and good as the best. If too thick, thin with alcohol.

The above will be found an excellent article for keeping harness bright and black, and also to preserve it from cracking.

Cement for Leather.

Dissolve 112 pounds of glue with 7 pounds of ammonia, set by fire or steam heat; stir them well, then add 7 pounds nitric acid. The mixture may be applied in either the liquid or solid state, and it can be applied as common glue is applied. If the metal is oily it does not prevent its adhesion.

The above adhesive mixture to cement leather, india rubber, or other soft material to iron and other metals, was patented several years ago in England,

and has been sold for many times the price of this book. A smaller amount may be made by using the same proportions.

Polishing Powder.

For cleansing and polishing tin, britannia, Silver and brass ware, the following is highly recommended.

Take $\frac{1}{2}$ a pound of pumice-stone ground, and $\frac{1}{2}$ a pound of powdered red chalk. Mix evenly together. This is for tin, brass &c. For silver and other fine wares, use the same articles as above only use 4 parts of red chalk to 1 part of pumice-stone.— Be sure and mix them evenly before using.

Use the articles dry with a piece of cloth or soft leather. This is one of the best cleansing powders ever invented.

Bleaching Liquid.

Take 4 ounces of unslacked lime. and pour upon it 6 quarts of boiling water. After the lime is well slacked, stir it all up. When it has stood long enough to entirely settle, strain off the clear fluid, put in $\frac{1}{2}$ a pound of sal soda and boil it a few minutes, so as to thoroughly dissolve the soda. Then take it off and let it cool. After it has settled strain the solution, and throw away the dregs. Now cut up 10 ounces of common bar soap, and dissolve it in the solution by boiling. Great care should be taken that no particles of lime are poured in.

For washing, put 6 or 8 gallons of water into the boiler and add to it 1 quart of this liquid. The clothes must be put asoak the night before washing, taking care to rub all the stain and dirt spots with soap. Then boil them with the liquid for $\frac{1}{2}$ an hour or a little more. They are then to be taken out and put into a tub, and clear boiling water poured over them. Then rub them out, rinse well, and they are ready to be hung out to dry.

Ice Cream.

Take 2 quarts of new milk and 2 quarts of sweet cream, 2 pounds of sugar, and 12 eggs. Dissolve the sugar in the milk and beat the eggs to a froth, and stir the whole well together. Then strain and bring to a scald but be careful and not burn it. When cool flavor with extract of vanilla or lemon.

Pack the tin freezer in a deep tub with broken ice and salt.— Whirl the freezer and occasionally scrape down from the side what gathers on. The proportions are 1 quart of salt to 1 pail of ice.

Here is another by which the best ice cream may be made without a freezer, hence called the

Farmer's Ice Cream Recipe.

Take 2 quarts of fresh milk—if a little cream be added all the better, though ice cream as ordinarily made, is innocent of cream. Scald the milk, stirring in 3 tablespoonsful of corn starch to give it body. These may be omitted, if not at hand. Stir well to keep from burning. Beat up 4 to 8 eggs, according to convenience, or as a rich dish is wanted, and pour the scalded milk on the eggs, stirring well. When cold add sugar and essence of lemon, or extract of vanilla, to suit. A very little salt also improves it.—Pour the cooled contents into a deep tin pail or can, holding about 3 quarts; put on the cover and set it in an ordinary wooden water pail. Pound up the ice to the size of a small hen's egg and less—some of course will be quite fine—pack it in around the tin can mixing in it about 1 pint of medium or fine salt. Pack it till it reaches nearly to the top of the can, but be careful none enters it. Now move the tin can or pail around by means of its bail, lifting the cover occasionally to scrape off the the frozen cream on the inside, so that other portions may come in contact with the freezing surface.

Ice cream is always considered a luxury, but heretofore supposed to be one not to be indulged in by farmers' families. Try the above and see if you need hereafter forego ice cream because no costly freezer is at hand.

Whipped Ice Cream.

To 1 quart of milk add 3 teaspoonsful of flour, stir it very smooth and boil over a slow fire till it is cooked. Set away to cool, then sweeten quite sweet, and flavor to your taste. To every quart add 3 pints or 2 quarts of thick sweet cream. Whip the cream and mix it in. Judge by the taste whether it is flavored or sweetened enough; if not, add more, stirring it thoroughly, and then freeze.

Philadelphia Ice Cream.

Two quarts of sweet cream, 3 spoonfuls of arrow root, whites of 8 eggs, well beaten, and 1 pound of loaf sugar. Boil the milk, thicken with the arrow root, and pour the whole on the eggs.—Flavor and freeze. The rule for freezing it is to use $\frac{1}{8}$ salt and $\frac{3}{8}$ ice, chopped fine.

Bed Bug Poison.

Take 1 pint of alcohol, 3 ounces sal ammoniac, 1 pint of spirits of

turpentine, 3 ounces corrosive sublimate, and 4 ounces of camphor gum. Dissolve the camphor in the alcohol, then pulverize corrosive sublimate and sal ammoniac and add it, after which put in the spirits of turpentine and shake well together.

This makes a first-rate Bed Bug Exterminator, and will sell readily at 25 or 50 cents per bottle. I am not aware that it is good for any thing only to kill bed bugs, but for that it is sure. I once knew a young chap who made up a quantity of it and went into a neighborhood where he was not acquainted, and sold it rapidly. Many would buy of him because he was a stranger in the place and they did not wish their neighbors to know they had bed bugs in the house, therefore did not want to buy bed bug medicine at the home drug store.

Prepared Glue.

Much money has been made selling "Prepared Glue," and the recipe for making it. I have selected a few of the recipes from which this prepared glue is made. These recipes I have bought of different persons in different parts of the country. I give a number so you can take your choice.

Fill a bottle $\frac{3}{4}$ full of good common glue, then fill up the bottle with whiskey. Cork it tight and let it stand about a week, when it will be ready for use.

If kept well corked this will keep for years. All prepared glue and mucilage should be kept in a bottle, well corked. After using glue or mucilage take the small blade of your knife and clean the inside of the mouth of the bottle, so that when you put the cork in, it will not stick and bother you to get it out.

One advantage of keeping the glue or mucilage corked, is that it prevents it from becoming thick, and thus is always ready for use.

Dissolve 1 pound of best glue in $1\frac{1}{2}$ pints of water, then add 1 pint of strong vinegar.

This is one of the prepared glues extensively sold through the country. Another method of preparing glue is as follows :

Take 1 quart of pure soft water and dissolve in it enough common glue to make it as thick as you desire. Then put in $\frac{1}{2}$ an ounce of nitric acid and stir it well.

Gum arabic dissolved in just enough soft water to make it of the requisite thickness, makes good mucilage for sealing letters and putting on labels.

Glue can be made water proof as follows :

Soak the desired quantity of best common glue in cold soft water until it becomes a little soft, which will probably be in about an hour. Take it from the water before it is so far dissolved as to lose its original form. Then dissolve it by a gentle heat, and at the same time pour in a little boiled linseed oil, and stir it well.

If furniture men would use this in putting on mahogany veneers, their customers would have less reason to complain of its falling off.

I have now given you the recipes that will enable you to make prepared glue as well and as good as those who have made fortunes by manufacturing and selling it.

Moths.

Moths will not trouble your carpets if you rub salt and pepper around the edges and upon them.

You can prevent moths from injuring clothing by placing a bar of yellow turpentine soap wrapped in

a thin paper in the trunk with your clothing. An open bottle of turpentine will answer the purpose, though there would be danger of its being upset.

Another way to keep moths, beetles and worms from drawers and trunks where clothing is kept, is to do up a little piece of camphor gum in a piece of paper and put it in with the clothing.

If your clothes closets have become infested with moths you may get rid of them by making a strong decoction of tobacco and applying it freely. Then sprinkle pretty freely with spirits of camphor.

Whoever has fine furs can preserve them from moths by washing them with a solution of 12 grains of corrosive sublimate in a pint of warm water. The solution is poison and should therefore be kept where there can be no danger of its being used for anything else.

Silver Solution.

1st Cut into small pieces a 25 cent piece and put it into an earthen vessel with half an ounce of nitric acid.

2d. Put the vessel into warm water uncovered until the silver dissolves.

3d. Add half a gill of water and 1 teaspoonful of fine salt; let it settle.

4th. Drain off and repeat, adding water and draining off until the acid taste is all out of the water.

5th. Add finally, about a pint of water to the sediment, also add 4 scruples of cyanide of potassa, and all is ready.

6th. Put in the bottom of the solution a piece of zinc, about 2 inches long and 1 inch wide, and $\frac{1}{8}$ of an inch thick. After cleaning, immerse the article to be plated in the solution about half a minute, letting it rest upon the zinc.

7th. Wipe off with a dry cloth and repeat one or more times according to the thickness of the plate desired. After you have repeated till the plate is thick enough, polish with buckskin.

Hunters' Secret.

If you wish to be successful in catching game, mink, muskrat, raccoon, otter, etc. :

Take 1 ounce of valerian and $\frac{1}{4}$ of an ounce of musk. Put them into a pint of whiskey and let it stand a month. Put a few drops of this on your bait.

An old hunter gave me this recipe and said it would be of great use to hunters. He had used it for years with good success.

Kid Gloves.

The best way to clean kid gloves is as follows :

Fold a clean towel two or three times and spread the glove on it smooth and neat. Then take a piece of flannel and dip it into new milk, and rub on to the flannel a good quantity of brown soap. With this rub the glove downward towards the fingers, holding the glove in its place with one hand. Continue rubbing till the glove is sufficiently cleaned. At first you may think you have spoiled the glove, but lay it by to dry and if it has been well cleaned it will soon look nearly as good as new, and be soft and smooth.

Here is another method :

Lay them on a clean board, and first rub the surface gently with a clean sponge and some camphene, or a mixture of camphene and alcohol. Now dip each glove into a cup containing the camphene, lift it out, squeeze it in the hand, and blow into it to puff out the fingers, when it may be hung up to dry. This operation should not be conducted near to a fire, owing to the inflammable nature of the camphene vapor.

I am told that French kid gloves may be nicely cleaned as follows:

Put the gloves on your hands and wash them in spirits of turpentine the same as though you were washing your hands. When you have got them quite clean, take them off and hang them up in a current of air or in a warm place. All smell of turpentine will soon be removed.

This method was practiced in Paris for a long time before being introduced to this country. As soon as introduced in this country a few individuals in some of our large cities advertised to clean kid gloves, and

by keeping the method a secret, they were enabled to make money.

To Color Kid Gloves.

Take a handful of logwood and put it into just enough alcohol to cover it. Let it soak 2 or 3 days. Put on one glove, and having wet it all over with the above preparation, rub it hard with a piece of sponge till it shines. This will make it a nice purple.—Repeat the process and it will be black.

Cheap Paint.

Take 11 pounds of dry lime, sifted fine; 1 gallon of water, 1 gallon of linseed oil, raw or boiled; $\frac{1}{4}$ pound of potash dissolve in a pint of water; which can easiest be done by heating in a kettle over the fire. First mix the lime and water, which will appear much like hasty pudding; then add your oil and potash water; mix thoroughly, and if the oil and water unite it is ready for use; if not, a little more potash water must added to cut the oil. Use no more potash than is necessary, for this purpose. Put on with a paint brush, as other paint. It will appear much thicker than ordinary oil paint, but it will lay easy in this condition.

A painter who for the last three years has used this preparation on first class houses says that but few persons can see any deficiency in it. It wears well, and costs less than half as much as an oil paint. It has been sold at various times to painters and others at prices ranging from \$5 to \$25.

Wash for Fences, &c.

This recipe will come in play at every "cleaning" season. It is endorsed by the *Chemical Gazette* as far superior to the common whitewash, both in appearance and durability.

Take a clean, water-tight barrel or other suitable cask, and put into it $\frac{1}{2}$ a bushel of lime. Slack it by pouring boiling water upon it, and in sufficient quantity to cover 5 inches deep, stirring it till thoroughly slackened. When slacking has been effected, dissolve in water and add 2 pounds of sulphate of zinc, and 1 of common salt. These will cause the wash to harden, and prevent it cracking which gives an unseemly appearance to the work.

If desired, a beautiful cream color is communicated to the above wash by adding three pounds of yellow ochre, or a good pearl or

lead color by the addition of lamp black or ivory black. For fawn color, add 4 pounds umber—Turkish or American—(the latter is the cheaper,) 1 pound of Indian red, and 1 pound of lamp black. This wash may be applied with a whitewash brush, and will be found much superior, both in appearance and durability to common whitewash.

Cure for Snake and Insect Poison.

This is the Smithsonian antidote for snake and insect poison and is worth, alone, ten times the price of this book.

Ten grains of iodide of potassium.

Thirty grains of iodine.

One ounce of water, the solvent.

To be kept in a vial with a ground glass stopper, and applied externally to the wound. It is not to be taken as a medicine internally. In using it, no time is to be lost, as death often ensues from a snake bite in fifteen minutes. Bites usually are inflicted on the hands or feet; and when this is the case, the first thing to be done is to stop the circulation of it with the blood, by applying a ligature to the leg or arm above the wound. A pocket handkerchief, the suspender, a piece of rope or a strip of bark in an emergency can be used; and a gun, umbrella, or walking stick or a limb of a tree, or axe helve, can be made a *tourniquet* to tighten the bandage. Then saturate a piece of cotton batting, sponge, a lock of wool or anything that will hold the fluid, with the antidote and sponge the bite with it and bind it to it, keeping it wet with it until it effects a cure, which it will do in an hour, and sometimes instantly. If practicable, a cupping glass should be applied, and the antidote should be placed upon the blister; but as bites are usually inflicted upon the fingers or toes, or among the tendons and bones of the wrists, ankles, or protuberances of the feet and hands, the process of cupping is frequently impossible. The antidote is so complete that five drops of undiluted poison from the fangs of a rattlesnake, mixed with five drops of the antidote, and inserted in a wound with a syringe was found by experiment to be as harmless as ten drops of water.

Glass.

The common way of cleaning glass bottles is to put in a few small shot with soap and warm water. As a usual thing this is undoubtedly as good a method as any but it sometimes happens that there is a hardened crust on the inside of the bottle which cannot be easily removed. This crust may be softened by putting in a little soda or pearlash. In using shot in this way some care must be taken or you may shake them hard enough to break the bottle. If the shot become wedged together in the bottle, take a stiff wire and loosen them.

Charcoal left in a bottle for a short time, will remove all disagreeable smell.

Fine coals put into a bottle with shot and water as above will aid in cleaning.

It frequently happens that glass stoppers become fixed in bottles and are not readily removed without breaking the bottle or stopper or both. Sometimes the stopper may be loosened by putting some salad oil in the groove between the stopper and the bottle. Then put it in a warm place and let it alone for an hour or two so that the heat may cause the oil to insinuate itself between the stopper and the neck of the bottle. Then if you cannot pull the stopper out gently strike the stopper first on one side and then on the other with any little piece of wood. Be careful and not strike so hard as to break the glass. If you cannot yet remove the stopper, put more oil in the groove as before and after letting it stand awhile try again. Altogether likely you will succeed after a few trials, but possibly you may not because the stopper may be an imperfect one.

Another way, is to wet a piece of cloth in hot water, and put it around the neck of the bottle. Take hold of the stopper immediately and try to get it out. You must, in this case work lively, for if the heat is allowed to expand, the stopper as well as the neck of the bottle, no benefit is derived. If you are successful in this, it will be by getting the stopper out after the heat has expanded the neck of the bottle, but before it has had time to expand the stopper.

If you are so unfortunate as to get some grease on your window, you can readily wash it off with a little spirits of turpentine. If you attempt to wash it off with water, very likely you will spread it all over the glass and perhaps, you may feel a little angry. Try the turpentine and keep your temper.

If you wish to break a piece of glass and have no diamond to cut it as you desire, try the following:

File a little notch in the edge of the glass. Then take a small iron rod and heat it red hot. Commence at the notch and draw the red hot iron slowly along the surface of the glass in the direction you wish. This will crack the glass and you can easily break it.

Some care is necessary in packing glass or china ware to be sent to another place. Get some hay, or soft straw will do. Have it a little damp but not much wet. Put in plenty of the hay and pack the heavy pieces at the bottom. Be sure and pack them tight in order that they may not slip about and get broken.

To Remove Gall Stones.

At the moment of getting into bed, drink from one table-spoonful to one gill of pure sweet oil. It may be necessary to continue this, till a gallon of oil is used, in many cases a much less quantity will effect a cure. If the oil does not move the bowels next day, take a little senna tea, or if feverish and restless, senna and salt, or castor oil.

Black Salve.

Take one quart of vinegar and three leaves of tobacco. Simmer to one pint. Add six ounces of lard, six ounces of beeswax, six ounces of rosin, and one gill of rum. Simmer to a salve, but be very careful and not let it burn.

A. W. Fenner, M. D., my preceptor, used this salve for curing fever sores and other old sores. He was very successful. I know of quite a number of cases that he treated successfully. He said the salve was the best he had ever used and he never had a case of failure where the patient used the salve thoroughly, and purified the blood.

Catarrh Snuff.

Pulverize together equal parts of blood root, gum myrrh and gum arabic.

This makes as good catarrh snuff as any you can buy.

To Cure Felons.

Apply the spinal marrow of an ox or cow once in 4 hours for 2 days.

Another method:

As soon as it becomes apparent that a felon is making its appearance, which is known by a continued soreness and pain proceeding from the bone, and sometimes evincing but little change for the worse for a week or two, take a strong cord of any kind and wrap it around the finger above the afflicted part, as tightly as can be borne. Keep it in this condition until the pain can be endured no longer. Now loosen the cord and as soon as the pain caused by the cording subsides, tighten it again. Continue this for several days, or until the felon is completely blackened and killed.

The cording stops the circulation and thus the sore has nothing to feed on, and soon dies of starvation. Even after the felon has made considerable progress, this remedy may effect a cure.

If the felon is not too far advanced, it may sometimes be cured by holding the finger in hot water or weak ley for an hour at a time two or three times a day.

Steep 2 ounces of fine cut tobacco, in half a pint of sweet oil. Apply it freely to the place where the felon is making its appearance.

This use of tobacco is much better than to steep it in your mouth.

Medicinal Root Beer.

Take a sufficient quantity of sassafras root, burdock root, wild cherry tree bark of the root, root of black alder, and spice wood or fever bush. Make a strong decoction by boiling several hours. Then strain and sweeten with molasses or honey. When it is blood warm add sufficient yeast to produce fermentation. As soon as it commences to ferment it is fit for use.

This may be taken freely as a diet drink. It is very pleasant and excellent to prevent disease and to keep the system in a healthy state. It is grateful and cooling in all kinds of fevers. Some like it better with a little ginger and hops added.

Everybody knows that in the haying or harvest fields, during the heat of summer, something may be supplied to quench the raging thirst, more effectual, more grateful, and more healthy than cold water. But few have the formula at hand for making the most healthy and cooling beverage. Here is one that is both healthful and grateful to the palate :

White Spruce Beer.

Mix together 3 pounds of loaf sugar, 5 gallons of water, a cup of good yeast, adding a small piece of lemon peel, and enough of the essence of spruce to give it a flavor. When fermented preserve in close bottles. Molasses or common brown sugar can be used if necessary instead of loaf, and the lemon peel left out.— Sometimes when unable to obtain the essence of spruce, we have boiled down the twigs.

Here is another invigorating drink especially adapted to the harvest field, of less pretensions, and the constituent parts of which are always at hand in every house :

Harvest Drink.

Mingle together 5 gallons of water, $\frac{1}{2}$ gallon molasses, 1 quart vinegar, and 2 ounces powdered ginger.

The following is old, but none the worse for that. Our grandmother was famous throughout her neighborhood for the excellence of the beer she used to keep on hand during the spring and summer, and no neighbor ever left her humble cottage without having taken a glass of her "home brewed." And she was indebted to her beer for many a friendly and neighborly call, though of course no one would have owned up the fact. But however that may have been, this was her recipe for

Root Beer.

Mix together a small amount of sweet fern, sarsaparilla, wintergreen, sassafras, Princess pine, and spice wood. Boil them with 2 or 3 ounces of hops, and 2 or 3 raw potatoes pared and sliced in 3 or 4 gallons of water. After boiling 5 or 6 hours, strain off the liquor, and add to it common molasses in the proportion of 1 quart to 3 gallons of the beer. If it is too thick, dilute it with water. A $\frac{1}{2}$ pound of browned bread added to the liquor, will increase its richness.

A very good, palatable, wholesome beer may be obtained from acorns and hops. It is slightly sparkling, eminently tonic, and a febrifuge, and for want of a better name we may call it a

Cheap Beer.

Steep a quantity of acorns in water for 15 or 20 days, renewing the water 4 or five times. Transfer them to a cask and add a handful of hops; fill up the cask with water, and lightly cover, not stop, the bung-hole, as there is an escape of gas. In 15 or 20 days the beer is fit for use; and as fast as it is drawn off fresh water may be poured on. The cost is less than 3-pence per gallon. It would supply 4 or 5 persons for 8 months with a very excellent beverage.

The following recipe will make a cooling and delightful beverage for summer. It is called

Temperance Beer.

Take 3 pounds of brown sugar with $1\frac{1}{2}$ pints of molasses, 4 ounces tartaric acid, 2 teaspoonfuls of essence of sassafras—mix in 2 quarts of boiling water, strain it and cool, when it is fit for use. Take 2 tablespoonfuls for a tumbler $\frac{3}{4}$ full of water, add a half teaspoonful of soda.

Try the following and see if it will not pay well for the trouble:

Cream Beer.

To 1 gallon of warm water take 2 tablespoonfuls of tartaric acid, 1 bowl of good brown or coffee sugar, 2 tablespoonfuls of ginger, and 1 cup of yeast. Let stand over night, and it is fit for use by adding a small quantity of soda as you drink.

Here is another:

Ginger Beer.

To a pail half filled with boiling water add 1 pint of molasse and 2 spoonfuls of ginger; when well stirred fill the pail with cold water, leaving room for 1 pint of yeast, which must not be put in until the preparation becomes luke warm. Place it on a warm hearth for the night, and bottle in the morning.

The following used to be a standard drink in all “well regulated families,” when “baking and brewing” always went together:

Common Small Beer.

Add to a pailful of water a handful of hops, a pint of bran, $\frac{1}{2}$ pint of molasses, a cup of yeast, and 1 large spoonful of sugar.

When you cannot find anything any better (and you cannot under any ordinary circumstances), try the following, and if you don't say it is good, it will not be the fault of the recipe.

Cream Soda.

To 1 gallon of water add 5 pounds of loaf sugar, 1 ounce Epsom salts, 1 ounce cream of tartar and 5 ounces tartaric acid. Boil the preparation well, skimming off the refuse matter accumu-

ting upon the surface. After cooling, set it away in bottles in a cool place. When desiring soda drinks, put 2 or 3 tablespoonfuls of this syrup in a tumbler $\frac{3}{8}$ full of water; add $\frac{1}{4}$ of a teaspoonful of super-carbonate of soda; stir briskly, and the effervescence will be equal to that from fountain soda. The Epsom salts, cream of tartar, tartaric acid, and super-carbonate of soda can be purchased for a small sum at any drug store.

Milk.

When you give milk to children let it be sweet, and if new, all the better. A very small quantity of loaf sugar may be put into the milk.

A spoonful of scraped horse-radish put into a pan of milk will keep it sweet many days longer than it will keep without the radish.

If you wish to keep milk sweet for a long time, observe the following directions :

Get some bottles and have them perfectly clean and dry. Draw the milk directly from the cow into the bottles, and cork them as soon as full. Tie the corks down with strong cord or wire. Then put some straw in the bottom of a boiler and place the bottles on it with straw between them. Fill the boiler nearly full of cold water and bring it to a boil, but do not allow it to boil more than a minute. Take the fire from under the boiler and let it gradually cool. When cold take the bottles out and pack them in saw dust and put them away in a cold place.

Milk preserved in this manner and kept where it will not get warm, will keep sweet a year or more.

When milk or cream has become slightly soured, it may be sweetened by putting in a very little carbonate of magnesia. A very little saleratus put in will sweeten it, but it injures the flavor of the milk.

It is said that morning's milk is the richest, yielding much more cream than that milked at night. If you milk a cow at noon the milk will not be as good as you would get from the same cow in the morning

or evening. For making butter and cheese many use the morning's milk, and take the evening's milk for domestic use.

For a wholesome, pleasant beverage, use milk and water. It is much better than the more expensive summer drinks.

Castor oil may be made palatable by boiling it with an equal quantity of milk, and then sweetening it with white sugar. Stir it well and let it cool.

Onions.

The following is considered by many very good :

Take two or three good sized onions and after you have peeled and sliced them, put them into a quart stew-pan with just a little water. Cover the pan and put it over a slow fire till the water has boiled away and the onions are browned. Then add about $\frac{1}{2}$ a pint of good beef gravy and boil until the onions are tender.—Season with pepper and salt or whatever you choose. Then stir it and mash the onions. Then pour it into a dish, to be eaten on broiled beef steak.

For an ordinary cold on the chest use this preparation :

Sew $\frac{1}{2}$ a dozen white onions in an old piece of white muslin, and pound with a hammer until all are crushed and the muslin moist with the juice. Wear on the chest all night and avoid exposure next day.

Yeast.

As you may sometime have occasion to make some yeast, I will here give a good recipe.

On Monday morning boil 2 ounces of hops in 1 gallon of water for about an hour. Then strain and let it stand until about blood warm. Now put in a little salt and $\frac{1}{2}$ a pound of sugar. Then take 1 pound of good flour and beat it up in some of the above prepared liquor. Then stir the whole together and set it near the fire. Stir it frequently for 2 or 3 days and keep it in a warm place all the time. Then add $2\frac{1}{4}$ pounds of mealy boiled potatoes well mashed. Let it stand by the fire or in a warm place another day, not forgetting to stir it frequently. Then strain it and put it up.

in large bottles. Keep it in a cool place and give the bottle a good shaking before using.

This will keep for two or three months and be better than when first made. It ferments readily without other yeast. I have seen another recipe very much like this but not proportioned correctly. Those who have used the other and failed can use this and *not* fail. If you are in a hurry you can use the following for making yeast quickly :

Take a pint of new milk, a teaspoonful of salt and a large spoonful of flour. Stir them together and set it in a warm place. In one hour it will be ready for use. It will not keep long so you must use it as soon as made. Twice the quantity of common yeast is required for use.

Another good way to make yeast is :

Take $\frac{1}{2}$ a pound of good flour and 3 ounces of brown sugar, and a sufficient quantity of salt. Put them into a gallon of water and boil for 1 hour. Before it is fairly cold put it into a bottle and cork it. In 24 hour it will be fit for use.

The above is the right proportion. If you want to make more, take a larger quantity only keep the same proportion.

Whitewash.

Take a sufficient quantity of unslacked lime. Pour on boiling water and keep it covered while slacking to keep the steam in.—When this is done, strain it through a fine sieve and add a little salt that has been dissolved in water. Then add a little common wheat flour in warm water, and if you add a little gum arabic dissolved in warm water, it will be all the better. Stir the whole well and let it stand a few days when it is ready for use.

It is best to make it in an iron kettle, and warm it when you are ready to use it. It should not be very hot, but it should be at least blood warm, and if a little warmer it will do no harm. This is a superior wash because it does not easily rub off. For

this reason it is excellent to whitewash fences. If you have a very nice job to do, you will need a small nice brush, but for all common work a large or common brush will do.

I am told this wash is very lasting. Those who do not want a pure white can make it any shade of color they please by putting in some coloring matter. dissolve the coloring matter in a little alcohol and stir it into the wash. You must consult your own taste as to what color you will have. Spanish brown stirred in will make a pink more or less deep according to the quantity used. Many think a delicate tinge of this beautiful for inside walls. Common clay finely pulverized and well mixed with Spanish brown makes a reddish stone color. Yellow ochre stirred in makes a yellow wash, but chrome goes ahead of it and makes a color that nearly every one considers more beautiful. In all cases where you add coloring matter, the darkness of the shade is determined by the amount of coloring matter used. No definite rules can be given, because tastes are so much different. Before using, you had better try experiments on a shingle or some old wall, and let it dry. If the color does not suit you, try different proportions of the coloring matter till you get what pleases you.

Never mix any green with lime for these reasons : The lime destroys the color, and the color has an ef-

fect on the whitewash which makes it crack and peel off. Inside walls are frequently much smoked and consequently dark. In such cases it is well to squeeze indigo through a bag into the water you use before stirring it into the mixture. This will make the walls appear clean, and a clear white. A little blue vitriol, pulverized and dissolved in warm water and added to the whitewash, gives a beautiful blue tint. Do not put in much of the vitriol.

The east end of the President's house in Washington is said to be whitewashed with the following :

Slack $\frac{1}{2}$ a bushel of nice unslacked lime with boiling water.—Cover it while slacking to keep the steam in. Then strain the liquid through a fine sieve or strainer, and add to it a peck of salt previously dissolved in warm water, and 3 pounds of good rice boiled to a thin paste should be stirred in boiling hot. Put in also $\frac{1}{2}$ a pound of powdered Spanish whiting, and a pound of clean white glue, which has been previously dissolved by soaking it well, and then hang it over a slow fire in a small kettle within a large one filled with water. Add five gallons of water to the mixture. Stir it well and let it stand a few days covered so dirt cannot get in. More than the above quantity can be made after the same proportion. It should be put on hot.

The same rules of coloring given after the other recipe will work equally well with this.

Eggs.

Hens will lay much better if you put a little cayenne pepper in their food two or three times a week. Try it.

If you are doubtful whether an egg is good or bad put it into a pail of water, and if good, it will lie on its side ; but if bad, it will stand on one end. Usually the large end will be uppermost, unless it has

been shaken considerably, in which case it will stand on either end.

I presume every good cook knows how to fry eggs, but not every one has tried the following way.

Break 3 eggs into a cup of milk, add 1 tablespoonful of fine flour and stir well; or, what is still better, beat the eggs and flour together and then stir in the milk. Then pour into a dish in which there is enough butter already hot. Let it cook slow and when one side is done turn it over and fry on the other side.

The following mode of pickling eggs is said to be good, and those who have tried the plan think others would try it if they had any idea how good it is.

Boil the eggs at least ten minutes so as to be sure they are boiled hard, and then take the shells off. When they are cold, put them up in jars and pour on them enough vinegar to cover them, in which has been boiled the usual spices for pickling. Tie the jars down tight with bladder and keep them until they begin to change color. They are excellent to be eaten with cold meat.

One way to preserve eggs is as follows:

Apply a solution of gum arabic with a brush to the shells, taking care to cover the whole surface and then let them dry, after which pack them in dry charcoal dust.

There are many other methods adopted to preserve eggs, here is one:

The eggs to be preserved should be kept in a cool place, and something put around them to keep the air out. Put into a tub or vessel 1 bushel of quick lime, 2 pounds of salt, $\frac{1}{2}$ a pound of cream tartar, and mix together with as much water as will reduce the composition or mixture to that consistency that will cause an egg when put into it to swim with its top just above the liquid. Then put and keep the eggs therein.

It is said that eggs may thus be kept good for two years, but I have not seen it tried and cannot therefore vouch for the correctness of the statement. The following hints will be of service:

It is pretty generally known that eggs keep longer by placing the small ends downward and keeping them in that position.—Be sure and have new laid eggs to deposit for keeping, not allowing them to become damp. Keep them cool in summer and do

not let them freeze in winter. In order to keep the eggs standing with the large ends up, take an inch board large enough for the purpose, and bore it full of holes far enough apart so that the eggs will not touch each other, and of the right size so that the little end of an egg can rest in it. Then put this board in a cool cellar and place the eggs in the holes with the small ends down. Put the eggs in these holes the same day they are laid. This plan has the recommendaion of being convenient and simple.

To Keep Grapes.

Select them carefully, taking only good bunches and remove all that are bruised or unsound. Place them in a box, a layer composed of two or three thicknesses of paper or cotton between each layer of bunches. Put the boxes in a cool room but not cold enough to freeze the grapes, though a slight frost will not hurt them much.

Varnish.

Varnishes for different purposes are prepared in different ways. I will give a few of the most useful.

If you want to make a varnish simply to prevent iron from rusting, proceed as follows :

Melt together 1 part of resin and 2 parts of tallow. Strain before it gets cold. While warm, but not hot, apply a thin coat to any article and lay it away in a chest, trunk or box where it will not be disturbed, but if you want the article in a place where it will be handled or moved around much this is not first-rate.

A very cheap and durable varnish for rough work may be made by mixing

50 parts (by weight) of raw linseed oil, 2 parts of litharge and 1 part of white vitriol. Boil the whole together until enough has evaporated to make the preparation thick enough to be used as a varnish.

To make a good varnish for tools and iron you wish to leave in places exposed to dampness, try this :

In the first place, get a tin can large enough for the purpose, and have it made strong and tight so that it may be corked. Put in 1 gallon of alcohol, 2 pounds of gum sandarach, and 4 ounces of gum mastic. All this should fill the can only half or two-thirds full. Cork it tight, and set it in a warm place. Shake it thoroughly two or three times a day, and when the gums are well dissolved it is ready for use. If in a hurry you can dissolve the gums sooner by placing the can in a kettle of hot water. If you do this,

it will be necessary to take the can out and shake it every few minutes.

Copal varnish may be prepared to varnish iron, steel &c., by adding an ounce of linseed oil to a pint of the varnish and then putting in half a pint of spirits of turpentine.

For varnishing grates:

Melt 4 pounds of common asphaltum and while warm add 1 quart of linseed oil, 4 ounces of dark gum umber. Boil slightly for 1 hour, then add 1 gallon of turpentine and mix well. If too thick, more turpentine may be added.

To varnish steel so as to give it a blue appearance as though highly tempered, simply add a little Prussian blue to common Demar or copal varnish, and then apply one or two coatings in the usual way. By putting more or less Prussian blue you can make it more or less blue. Demar varnish being more transparent, is preferable to copal.

Silk.

When black silk is faded you can easily revive the color thus:

Take $\frac{1}{2}$ a pound of logwood chips and boil in 1 gallon of water for $\frac{1}{2}$ an hour. Then strain, and put the silk in. Let it simmer about 20 minutes, then take it out and let it dry. Now put a little blue vitriol into the dye and stir it about five minutes while gently boiling. Then let it cool, and put the silk in. Put it over the fire and bring it to a heat just sufficient to make it simmer, and keep it so for half an hour and your work is done.

Another method:

Put a large handful of fig leaves into 2 quarts of water and boil until it is reduced to a pint. Then strain through a cloth. Do the leaves up in the cloth and squeeze out all the dye you can. Put it into a bottle and keep it corked, so that you may have it for use at any time you please. Sponge the silk with it.

If you have an old silk dress that has lost much of its good looks, take it carefully apart and put it

into a tub of pure rain water. Let it lay there three hours and then dip it up and down a few times, but do not squeeze it or ring it. Hang it up to drain and let it drain until nearly dry, but before it is quite dry take it down and iron it smoothly. You will find you have greatly improved its looks.

If you have a very fine silk dress and have been so unfortunate as to get a disagreeable looking grease spot on it in a conspicuous place, you undoubtedly wish some way of removing the grease without injury to the dress. A lady who ought to know tells me the following way is as good as any :

First lay a piece of woolen cloth upon a table, and lay the part greased smoothly on with the right side downwards. Then lay a piece of common brown paper on top, and apply a flat iron just hot enough to scorch the paper. Do not let the iron remain more than 6 seconds. Then briskly rub the stained part with a piece of dry paper.

If the color has been removed from silk by acid, it may usually be restored by applying a little aqua ammonia. Spirits of turpentine or alcohol are good to remove stains from silk.

Silk should never be kept folded in white paper, because it injures the color of the silk.

Rice.

For a change it may be pleasant to have occasionally a loaf of rice bread. Try this :

Put 1 pound of rice into $\frac{1}{2}$ a gallon of water, and boil it gently, stirring it frequently, until it is soft enough to be beaten into a paste. This being done, before it gets cold put it into sufficient flour and at the same time add the usual quantity of yeast. Then go through the process of bread making in the usual way.

This makes excellent white bread.

Rice Jelly for the Sick.

In selecting your rice be sure you get some that has a clear fresh look. The best rice is large. Old rice sometimes has a black insect inside the kernel. Before you buy, see if it looks clear.

Mix equal parts, by weight, of clean rice and white sugar; or, if you want it sweeter use more sugar. Boil and stir it until you have a glutinous mass. Then strain and you can season with whatever you please.

To Stop Bleeding.

It is not very often that we have an occasion to use any remedy to stop bleeding, but it is well to know how to do it, in order that we may be prepared in case of necessity.

In the first place, cover the wound profusely with cobwebs, or flour, or salt; either of these are good, alone. Sometimes it may be necessary to mix together salt and dry flour. Don't be foolish enough to let your physician make you think you have more blood than you need, and therefore bleed you. In slight wounds the blood may be easily stopped as above, but in case of excessive bleeding cobwebs may not do the work. If the wound is severe and the blood comes in jets or spurts, an artery is severed, and unless you work fast the patient may die in few minutes. In such a case be spry as you can. Tie a handkerchief around near the wound but between the wound and the heart. Let the handkerchief be loose enough so that you can put a stick between it and the skin. Do this, and twist it around until the blood ceases to flow. Keep it there until the doctor comes. If the wound happens to be where a handkerchief cannot be used, press with the thumb between the heart and the wound, and increase the pressure until the blood ceases to flow. Do not lessen the pressure for an instant. Be sure and get a physician as soon as possible.

Stye on the Eyelid.

If you have ever had one stye it is quite likely you do not want another. Therefore, as soon as you feel one coming put a teaspoonful of black tea in a small bag, and pour onto it just enough hot

water to moisten it. While pretty warm put it on the eye and keep it there all night. Tie a handkerchief around the head so as to hold the bag of tea in its place. If you wake, and can do it, it will be best to moisten the tea with warm water two or three times during the night. It is very likely that when morning comes no styne will be there, but if it has not gone another application will take it away.

How to Hold a Sick Person.

Whenever it becomes necessary for you to move or hold a sick person, do not grasp him with the tip ends of your finger. If you are to support any part of the body, do it with the whole breadth of the hands, in order to not press into the flesh.

Chapped Hands.

I will give a few recipes for curing Chapped hands, and you can select just which you please.

Wash your hands as clean as you can, and instead of using a towel to dry them, put the hands into some oat meal and rub them the same as though you were washing them in water. If they are very badly chapped it will be well to use a little oat meal instead of soap in the water.

The following is said to be a sure cure for chapped hands.

Wash the hands clean with warm water and then wipe them dry with a towel, then grease them with mutton tallow, and rub the grease in before the fire. Do this just before going to bed, and put on a pair of gloves, in order to avoid greasing the bed clothes. Practice this for a few days, or as long as necessary. It will cure the hands and make them soft, white and smooth.

Washing them in vinegar is also recommended.

Another way is to wash them in warm water and before they are dry take a piece of hard soap in the hands and rub enough of the soap on to make quite a thick coating. Let it dry on and leave it till the next morning. Many practice this to make their hands white. It is a simple and very good way of doing it.

To Clear a Room of Mosquitoes.

Take of gum camphor a piece about $\frac{1}{8}$ the size of an egg, and evaporate it by placing it in a tin vessel and holding it over a lamp or candle, taking care that it does not ignite. The smoke will soon fill the room and expel the mosquitoes.

How to Get Rich.

There is no doubt that the whole human family have a desire to accumulate sufficient wealth to make them comfortable in life. I will give some rules and hints which will be of service if observed, although they will be of little use unless combined with energy, good judgment, perseverance and economy. All who read them may not become rich, yet I will say that if you ever get rich, and retain your wealth for any length of time, you must practice upon the principles here laid down.

The remarks are not original with me, but they are so good I will give them a place in this book. — I heartily commend them to the attention of every young man just starting out in life. I think they afford the true secret of attaining wealth. A single perusal of this essay may be the means of making

some of my readers men of wealth and influence who, if they had not read it, would have lived and died poor.

We are told that fortune is a fickle dame full of freaks and caprices; who blindly distributes her favors without the least discrimination or regard to the worthiness of her favored ones. She is represented to be so inconsistent and wavering that her most faithful votaries can place no reliance on the fair promises she makes. Disappointment, they tell us, is the lot of those who make offerings at her shrine. Now all this is a vile slander.— Dame Fortune is not so blind and fickle as she has been represented to be.

To the superficial observer, wealth often appears the result of mere accident, or a fortunate occurrence of favorable circumstances, without any exertion of skill or foresight, yet every man of sound health and unimpaired mind may become wealthy by taking the proper steps.

Foremost in the list of requisites are honesty and strict integrity in every transaction of life. If a man would possess the confidence of all who know him, he must have the reputation of being fair and upright in all his dealings, and in order to have that reputation, let him in no case do a mean act. If these qualities are lacking, every other merit will prove unavailing. If you have anything to sell, never represent it as good when you know it is bad.

Ask concerning a man, "Is he active and capable?" Yes. "Industrious, temperate, and regular in his habits?" O, Yes. "Is he honest? Is he trustworthy?" Why, as to that, I am sorry to say that he is not to be trusted; he wants watching; he is a little tricky, and will take an undue advantage, if he can. "Then I will have nothing to do with him," will be the invariable reply. Why, then, is honesty the best policy? Because without it you get a bad name, and every body will shun you.

A character for knavery will prove an insurmountable obstacle to success in almost every undertaking. It will be found that the straight line is, in business, as in geometry, the shortest. In a word, it is almost impossible for a dishonest man to acquire wealth by a regular process of business, because he is shunned as a depredator upon society.

Needy men are apt to deviate from the rule of integrity, under the plea that *necessity* knows no law; they might as well add that it knows no shame. The course is suicidal, and by destroying all confidence, ever keeps them immured in poverty, although they may possess every other quality for success in the world.

Punctuality, which is said to be the soul of business, is another important element in the art of money-getting. The man known to be scrupulously exact in the fulfilment of his engagements, gains the confidence of all, and may command all the means he can use to advantage; whereas, a man careless and regardless of his promises in money matters, will have every purse closed against him. Therefore be prompt in your payments.

Next, let us consider the advantages of a cautious circumspec-

tion in our intercourse with the world. Slowness of belief, and a proper distrust are essential to success. The credulous and confiding are ever the dupes of knaves or imposters. Ask those who have lost their property how it happened, and in most cases you will find it has been owing to misplaced confidence. One has lost by endorsing; another by crediting; another by false representations; all of which a little more foresight and a little more distrust would have prevented. In the affairs of this world men are not saved by faith, but by the want of it.

Judge of men by what they do and not by what they say. Believe in looks, rather than in words. Observe all their movements. Ascertain their motives and their ends. Notice what they do and say in their unguarded moments, when under the influence of excitement. The passions have been compared to tortures, which force men to reveal their secrets. Before trusting a man, before putting it in his power to cause you a loss, possess yourself of every available information relative to him. Learn his history, his habits, inclinations and propensities; his reputation for honesty, industry, frugality, and punctuality; his prospects, resources, supports, advantages and disadvantages; his intentions and motives of action; who are his friends and enemies, and what are his good or bad qualities. You may learn a man's good qualities and advantages from his friends—his bad qualities and disadvantages from his enemies. Make due allowance for exaggeration in both. Finally, examine carefully before engaging in anything, and act with energy afterwards. Have the hundred eyes of Argus before hand, and the hundred hands of Briarius afterwards.

Order and system in the management of business must not be neglected. Nothing contributes more to despatch. Have a place for everything, and everything in its place; a time for everything, and everything in its time. Do first what presses most, and having determined what is to be done, and how it is to be done, lose no time in doing it. Without this method, all is hurry and confusion, little or nothing is accomplished, and business is attended to with neither pleasure nor profit.

A polite, affable deportment is recommended. Agreeable manners contribute powerfully to a man's success. Take two men possessing equal advantages in every other respect, but let one be gentlemanly, kind, obliging, and conciliatory in his manners; the other harsh, rude, and disobliging, and the one will become rich, where the other will starve.

We will now consider a very important principle in the business of money getting, namely: Industry—persevering, indefatigable attention to business. Persevering diligence is the Philosopher's stone which turns everything to gold. Constant, regular and systematic application to business, must, in time, if properly directed, produce great results. It must lead to wealth, with the same certainty that poverty follows in the train of idleness and inattention. It has been truly remarked that he who follows his amusements instead of his business, will soon have no business to follow.

The art of money saving is fully as important as the art of money getting. Without frugality no one can retain the wealth they have acquired, but with frugality the poor may become rich, and the rich can retain their wealth. Those who consume as fast as

they get are in the high way to ruin. We meet with very little poverty that does not grow out of idleness or extravagance. So habitual industry and frugality will ensure a fortune to nearly every one who will practice economy. The practice of economy is as necessary in the expenditure of time, as of money. An old motto is: "Take care of the pence and the pounds will take care of themselves." It is equally true that if we take care of the minutes the days will take care of themselves.

If you are poor and wish to acquire wealth, you will find it necessary to practice self-denial. The acquisition of wealth demands as much self denial and as many sacrifices of present gratification as the practice of virtue itself. Vice and poverty proceed in some degree from the same source, namely, the disposition to sacrifice the future to the present; the inability to forego a small present pleasure for a great future advantage. Men fail to make fortunes simply because they are unwilling to deny themselves momentary enjoyments for the sake of permanent future advantage and happiness.

In all parts of the country, and especially in large cities, we meet with persons who, in order to support the appearance of wealth, constantly live out all they earn, and in many cases live beyond their income. To make up the deficiency, they contract debts which are never paid. We also meet with many drones of society, who pass their days in idleness, and sponge a living from the lives of the industrious. Many who run a short-lived career of splendid beggary, could they be persuaded to adopt a system of rigid economy for a few years, might pass the remainder of life in affluence. But no! They must keep up *appearances*, they must live like other folks. The consequence is, they go into old age with poverty instead of wealth.

Their debts accumulate, and after a while their credit fails. They are harrassed by duns and besieged by constables and sheriffs. In this extremity, as a last resort, they submit to a shameful dependence, or perhaps engage in criminal practices which entail hopeless wretchedness and infamy on themselves and families.

Stick to the business in which you are regularly employed. Let speculators make their thousands in a year or day; mind your own regular trade, never turning from it to the right hand or to the left. If you are a professional man, or a mechanic, never buy lots or stock unless you have surplus money which you wish to invest. Your own business you understand as well as other men; but other people's business you do not understand. Let your business be some one which is useful to community. All such occupations possess the elements of profit in themselves.

Let a sacred regard to the principles of justice form the basis of every transaction, and regulate your conduct, whether in business or pleasure. Whenever you make an engagement, let no trifling circumstance cause you to break it.

You will meet with many disappointments and failures in life, for which you should be in some degree prepared. Always hope for the best, but be on your guard to repel the worst in case it comes.

Do nothing in a careless manner, but always arrange your business so that you will not get in a great hurry. Do your most important business first, and if anything must be left undone, let it

be something of comparatively little account. If you are going on a journey and have a trunk to pack, do not wait till the last hour, but pack it in advance of time. It is much better to be considerably ahead than to be a little behind.

Never employ any one to do a job for you when you can do it to as good advantage yourself.

Do your business in such a way that it is a pleasure to you.

Cultivate order. Have everything just where it belongs. If you are writing, when you are done, put your pen, ink and paper in their proper places. If you read a book or a newspaper, when you are through, put it in its proper place; and so with everything else. "Let all thing be done decently and in order."

Be prompt and decisive, but courteous with all your customers.

The rules I have given, if strictly adhered to, will be of great service.

Honey.

Hundreds and thousands of dollars have been made on recipes for making artificial honey. I have procured a few of the recipes which are the most highly recommended, and will give them a place here.

To 10 pounds Sugar add 3 pints water, 40 grains Cream Tartar, 10 grains Essence of Peppermint, 3 pounds Honey. First dissolve the sugar in water, and take off the scum; then dissolve the cream tartar in a little water, which you will add with some little stirring, then add the honey, &c., heat to a boiling point, stir for a few moments, and it is done.

The above recipe I bought of a traveling Patent Right Dealer, who informed me that he had more than once sold the recipe for one hundred dollars. I have never tried it, but presume it is as good as any. Here is another:

Take 5 pounds of common brown sugar, and one pint of hard water; put over the fire and bring to a boil. As soon as it commences boiling add $\frac{1}{4}$ ounce of pulverized alum. Stir about five minutes while it is gently boiling. Then remove from the fire, and strain before it is cold. Immediately after it is strained, add half an ounce of cream of tartar and two drops of otto of roses. Place it over fire enough to keep it warm, but not to make it boil. Stir it for a few minutes, when you can take it off and as soon as it is cold it is ready for use.

A little pulverized slippery elm put into water will make it as thick as honey. Add as much of this as

you please. You can thus reduce the price considerably. Those who make the honey to sell, have sometimes added rather more of the slippery elm water than their customers thought advisable.

Cuba Honey.

A great deal of "Cuba Honey" has been sold and used in this country. Here is the recipe to make it:

Take 10 pounds of good brown sugar, 1 quart of water, 1 ounce of gum arabic, 4 drops of peppermint essence. Put the whole together in a suitable kettle, and place over the fire. Bring it to a boil, but do not let it boil more than two or three minutes. Take it off and strain, then beat well one egg and put it in together with one pint of water, and about a quarter of a pound wheat flour. Place it over the fire again and as soon as it begins to boil skim well. Let it boil for two or three minutes. Remove from the fire, and when it is about blood warm stir in two drops of otto of roses. If one pound of good bees honey in the comb is put in before boiling the first time it will be all the better for it.

It is claimed for this honey that if it is sealed up, it will keep any length of time as good and fresh as when new. As I have never tried I can not say whether this is correct or not. I have often eaten honey said to have been made from some of these recipes. It certainly tasted good.

Here is another recipe, for which a friend of ours paid \$5 only a short time since. Several persons in the same neighborhood paid the same for it. We have eaten some of the honey they made, and must say that we thought we had never eaten better honey in our life—that was before we knew it was not made by the "little busy bee," that has so "long improved each shining hour." We could hardly be convinced that it was not the genuine article that we

had been praising so lavishly. Here is the recipe for the best

Clover Honey.

Take 10 lbs. of white moist (brown) sugar, 3 lbs. of soft water, $2\frac{1}{2}$ lbs. of Bee-Bread Honey, 40 grains cream of tartar, 12 drops oil of peppermint, half an ounce of gum arabic 10 drops essence winter green, put into a porcelain kettle, and let them boil for 5 minutes, then take 2 teaspoonfuls of pulverized slippery elm and mix with 1 lb. of water, then strain it into the kettle; take it off and beat up the whites of two eggs and stir it in; let it stand two minutes, then skim it well, and when cold add 1 lb. of pure bees' honey; for larger quantities observe the same proportions. By adding more slippery elm to a proportionate quantity of water, the manufacturer can make it as cheap as he pleases, as a small quantity of slippery elm will thicken a pail of water to the consistency of honey.

What we mean by bee bread honey, is that made by the bees in the fall of the year, to subsist on during the winter, it being much stronger than that made in the spring. If that cannot be procured, honey in the comb will answer the same purpose, by putting in one half lb. more than is given in the recipe, but makes considerable difference in the price.

Bruises.

If the skin is not broken wet a piece of sponge with the tincture of arnica, and bathe the bruised place. This is one of the most effectual remedies in use.

If the skin is broken, tincture of arnica may be used, if sufficiently diluted with soft water. Dilute the tincture with at least twelve times the quantity of water, and bathe the part bruised or jammed.

I once had the misfortune to severely bruise or rather jam one of my fingers. I had nothing with me to put on only some tincture of arnica. I put a little of this into about twenty times the quantity

of water and then freely bathed the bruised finger. It stopped the pain, and my finger got well in due time. I am told that in case of a bite by a dog or other animal, this tincture sufficiently diluted, will work as well as in case of a bruise.

Hot water is very efficacious in removing pain and preventing discoloration. Whenever you get a black eye by a fall on the ice, or running against a bed post, or stopping a powerful fist, apply a cloth wrung out of very warm water, and renew it often until the pain ceases. The moisture and heat liquify the blood and send it back to its proper channel.— Use hot water or very warm water but not cold. It should be applied as soon as possible, and as hot as it can be borne. It is excellent to prevent stiffness. If the bruise is on the hand or foot, it will do to put it into the water and keep it there for some length of time, but it will be better to apply it with a cloth as above, only be sure and apply it often enough to keep it hot.

Perhaps the above remedies are enough, but I will mention the following:

Dissolve 2 drams of opium in half a pint of boiling water. As soon as cold it is ready for use. Bathe the bruise. This is also good to use on painful ulcers.

Bruises should always be attended to immediately, for if left alone they often produce worse consequences than cuts. One remedy is to bathe the bruised part with warm vinegar. Some use slippery elm as

a poultice. If the bruise is a very bad one, something more than an external application may be necessary. The bowels should be kept open. The food should be light and the drink weak.

Treatment of Dogs.

If I could have my way about it, every dog in the country would be killed in less than twenty-four hours, but as I am not to decide the matter, and as there are many who are bound to keep dogs, I will give the best way of treating them.

The best way to keep a dog in good health, is to let him have plenty of exercise, and not too much food. Over-feed your dog, and keep him where he will not get much exercise, and he will be pretty sure to become sick, or so lazy as to be of little or no use. If you own a dog, by all means see to it that he is kept clean; and for this purpose, encourage him in taking an occasional swim.— Wash him occasionally, but do not use any soap. Use clean soft water only water. If you use soap, you will prevent him from licking himself, and thus he will be literally more dirty than if you had not washed him at all.

Some who know more about dogs than I do, say that they should not be fed more than once a day. Meat either raw or boiled may be given to any healthy dog. Those who boil meat for their dogs, often take the water in which it is boiled, and thicken it with oat meal or barley meal, and then feed it to their dogs. The dog distemper prevails most in spring and autumn, and is most liable to attack dogs between the ages of six months and four years. The disease may be known by dullness of the eye, and a husky cough. The dog has but little appetite, shivers and sometimes has fits.

If fits occur you should immediately send for a veterinary surgeon, or your dog may not live long. When a dog has the distemper, he should be allowed to run on the grass. A little sulphur should be put in the water he drinks, and he should not be allowed to eat much more than half his usual allowance. Unskillful persons should not attempt to treat dogs that have the distemper.

When a dog's jaws are set upon any thing, instead of pulling upon him to make him let go, wet a sponge or cloth with aqua ammonia and apply it to his nostrils. Giving the dog a pinch of snuff will produce the same effect, and may frequently be more readily obtained.

The above instructions are given more especially for the benefit of ladies who have the care of lap-dogs and poodles. Out-door dogs usually need no other care than to be furnished with enough to eat.

Hydrophobia.

This is one of the most dreadful of all dreadful diseases. The best prevention would be to kill all the dogs, but as that is not likely to be done, I will give some of the best "cures" now known. The first symptoms are attended by thirst, fever and languor. The dog when awake is restless but languid, and when asleep starts convulsively.

Whenever there is the least suspicion that the dog

is likely to "run mad," he should be firmly chained in a place where children can not get near him. No dogs or cats or any living creature should be allowed to come near enough to be bitten. Any one going to feed him should proceed with great caution and as a protection wear very thick leather gloves. If the dog snaps savagely at an imaginary object, it may be regarded as an almost sure sign of madness, and if he exhibits a terror of water, it is then confirmed hydrophobia, and you may as well kill him without further delay.

When a dog exhibits a dread of musical sounds, it is quite common to take advantage of that dread, and make music where the dog is, "just for the fun of the thing." Let me say that though this may cause much sport, it is nevertheless a very dangerous sport, and I would advise every one to look to some other source for amusement. Many dogs have been driven mad by making sport of them in this way.

When one has been bitten by a mad dog the symptoms usually appear in a few weeks, but sometimes the poison may remain in the system for years, and then break forth with all the terror of the dread disease.

As soon as possible after being bitten by a rabid dog, tie a string tightly over or above the wound, and cut out the bite. The object of tying a string or ligature above the wound is to prevent a too rapid flow of blood and to prevent the absorption of the poison into the circulatory system. Cut out the bite and cauterize the wound with a red-hot iron, or lunar caustic. The bandage may be removed in a few hours and the wound treated the same

as any other wound. Give a purgative and plenty of warm drink. The cauterization may be more effectually performed by giving the patient chloroform, therefore if chloroform can be procured, sprinkle a few drops on a handkerchief or piece of sponge and apply to the nose and mouth, before you commence cauterizing the wound. Keep applying the chloroform until the breathing is a little difficult, and then cease the application. It is considered perfectly safe to use chloroform in this way if care is used in giving it. Be sure and bind the upper portion of the limb firmly with a strong ligature, as stated above, to prevent a too rapid flow of arterial blood. There should be a free discharge of venous blood, and in case this does not take place, apply a suction force to the bitten part. Some, instead of cauterizing the wound with a red hot iron, recommend that it should be thoroughly washed and soaked with aqua ammonia pretty well diluted. Either of these remedies will cause much pain, but it is quite important that they be promptly attended to.

So far, I have only given remedies for immediate application, after being bitten. I will now speak of the disease after the system has been contaminated, and the premonitory symptoms begin to appear. When the case has progressed as far as this, my advice would be to let drugs entirely alone. Have nothing whatever to do with tinctures, muck, elecampane, calomel, or any other drug. Any of them, or all of them I consider worse than nothing. Instead of making the patient swallow medicine, put him into a vapor bath as hot as he can bear and continue the sweating process for a quarter of an hour. Then dash upon him a bucket full of cold water, and immediately cover him with blankets in a dry bed. By this time he will be likely to call for a drink of cold water, but do not give him any. Give him a large tumbler full of strong red pepper tea. Some have recommended to put a little tincture of lobelia in the pepper tea, but I think it is unnecessary. If another paroxysm comes on, go through the same process as before, only do not allow the patient to remain in the vapor bath more than eight or ten minutes.

This may seem a terrible ordeal. It is indeed hard, but it is the best of all plans yet known. It may be necessary to go through the sweating process three or four times. After going through this process three or four times, if the patient does not vomit, give him some boneset tea. Immediately after vomiting let him drink a little sage or peppermint tea. By this time the crisis will probably be passed and all danger of fatal termination removed, but if any indication of another paroxysm appear, do not hesitate to repeat the sweating process, to be followed by a tumbler full of red pepper tea, and in two or three minutes more, some boneset tea, unless the patient should vomit pretty freely, in which case the boneset tea may be omitted.

Some years ago I read an account in the papers of a man who had been bitten by a mad dog. A few weeks later he was suffering from hydrophobia. He concluded to commit suicide, rather than suffer the terror of the disease. He determined to die as easily as possible, and could think of no better way than to suffocate himself in a hot vapor bath. He accordingly prepared one and entered the room when it was as hot as he could make it, probably up to about two hundred degrees. Instead of being suffocated

he fell into a profuse perspiration. This made him feel so much better, he gave up the idea of trying to commit suicide. He however, prepared the room again, and after taking a few baths in that way was permanently cured.

So much for the treatment of the disease without poisonous remedies. I have already given what I consider the best treatment of hydrophobia, but as there may be some who would like to know some other way, I here give the drug side of the question.

Take the root of common black ash, and after peeling off the bark, boil it to a strong decoction. Drink one gill of the decoction about half an hour before each meal, and take a swallow of it before going to bed at night. The first doses should be taken as soon as possible after being bitten, and continued as above for three weeks.

The above is the recipe as given to me, but I should recommend that only half a gill instead of a gill be taken for a dose. Here let me say that whatever is a good remedy to cure hydrophobia, is considered a good remedy to cure snake bites.

I cut the following recipes from a country newspaper. I do not now remember what paper I found them in, but the editor speaks very favorably of them.

SAXON REMEDY.—Immediately after the bite, wash the wound clean with tepid water, and dry it with a cloth, by pressing the cloth onto the wound, and then removing it. As soon as sufficiently dry, pour upon the wound a few drops of hydrochloric acid. In a few minutes wash the wound with warm vinegar, and dry as before. Then pour on a few drops of hydrochloric acid.

GRECIAN REMEDY.—Eat the green shoots of asparagus. Do not eat much of anything else. Remain as quiet and sleep as much of the time as you can. If you do not perspire freely, get into a good feather bed, and have some one put another feather bed over you.

I condense the following from a long article I saw going the rounds of the papers some years ago. I take the liberty of making a little change in the recipe as I consider the original too far out of the way.

Pulverize dried elcampāne root and weigh out four ounces.—Then dissolve gum arabic in soft warm water, to make it about as thick as strained honey. Measure out one gill of this, and add to it the pulverized elcampāne root. When a person is bitten by a mad dog or any other rabid animal, put two teaspoonfuls of the above mixture into one pint of new milk. Steep it until half the

quantity of the milk is evaporated. Strain and drink the whole half pint in the morning, and not eat anything before noon. Repeat the same dose for three or four mornings; let the patient take a dose every third morning and fast as before, till he considers himself in no danger of the hydrophobia. He should eat only a light supper, if any, and by no means eat highly seasoned food.—Exercise moderately, but be careful and not get greatly fatigued. Do not get wet, nor remain in the hot sun for any length of time. If the patient is a child, the dose should be smaller, but in other respects the treatment should be the same as for an adult.

Let me repeat that whatever is good for the bite of a mad dog, is good to cure the bite of a snake.—Please remember this, and it will be worth something to you, sometime.

A celebrated London physician, in a letter to a professional friend at Leeds, says: “Every year produces an infallible nostrum for hydrophobia.—The malady, nevertheless, exists in all its unknown mystery and terror. Except that it is believed purely a disease of the nervous system, nothing is known of the virus and its laws of propagation; so I have long dismissed keeping a list of remedies for the developed disease. Yet you will be astonished if I add that I believe it never, or almost never, need be taken of the maddest of dogs. About twenty-five years ago, more or less, I was sent for to see the present Lord L——, then a fine, healthy lad, who, it was said, had been licked, not only over the lips but within the mouth, by a little terrier, which was found sitting on the sleeping lad’s chest and dipping his tongue into his master’s open mouth. The demeanor of the dog alarmed the late lord L——, and I was

called in to ascertain the fact of the dog being or not mad.

“Now on this point, I did not consider myself any authority, and so sent for Sir Benjamin Brodie, who, though agreeing with me as to the probable madness of the dog, nevertheless desired that the late Mr. Youatt, the veterinary surgeon, and a most remarkable man, should be appealed to. He at once pronounced the dog as laboring under hydrophobia, and turning to me, added, ‘If you will come to me in five days, at our dog hospital, we can dissect the animal.’ I did so, and found the dog dead, and Youatt busy in opening the carcass. I naturally was shy in touching the animal, and asked if he were not afraid. ‘No,’ he answered, ‘I have repeatedly been bitten by most undoubted patients—(there were several in cribs there, then, which I saw alive,) and I never have any fear.’ I asked him how often he had been bitten; he told me eight times; and then he called his assistant porter, and asked him how often he had been bitten; he I think owned to at least eight, and I believe ten, undoubted introductions of the virus; and be it remembered, that the attacks or bites were all on the hands of these men, so could not be wiped off by any intervening garment. This was his remedy:

YOUATT’S REMEDY.—Allow the common nitrate of silver, easily procurable, to filter into the wound; it decomposes the saliva, and in doing this, destroys the virus. The actual cautery, the

caustic potass, and excision, are unsafe and liable to fail. The nitrate of silver chases the poison into the very capillaries and neutralizes it. Since I have known this I always use it for any bite of a dog, sound or not, and am at rest.

The poison of hydrophobia remains latent on an average, six weeks; the part heals over, but there is a pimple or wound, more or less irritable; it then becomes painful, and the germ, whatever it is, ripe for dissemination into the system; then all hope is gone. Nevertheless, between the time of the bite and activity of the wound previous to dissemination, the caustic nitrate of silver is a sure preventive; after that, it is as useless as all the other means. The best mode of application of the nitrate of silver is by introducing it solidly into the wound. It melts in an equal quantity of water. If already healed, the cicatrix should be rubbed and causticated entirely away.

Here is another remedy that has been vouched for by scientific men :

GERMAN REMEDY.—A German forest keeper, eighty two years old, not wishing to carry to the grave with him an important secret, lately made known a recipe he has used for fifty years, and which, he says, has saved several men and a large number of animals from a horrible death by hydrophobia. Bathe the bite as soon as possible with warm vinegar and water, and, when this has dried, a few drops of muriatic acid poured upon the wound will destroy the poison of the saliva and relieve the patient from all present or future danger.

Fever.

Fever is an acute affection or disease in which all the functions of the system are deranged, the most prominent phenomena of which are acceleration of the pulse, increased heat, derangement of the cerebral or nervous system, loss of appetite, and increase of thirst.

The above is the best definition of fever I ever heard. I got it from my preceptor, A. W. Fenner, M. D. He was a well read physician, and I am indebted to him for much of the valuable medical information contained in this book. In the first place

I will speak of fevers in general, and then speak of some particular forms of fever.

I have not the least doubt that if we could always keep the blood pure and in a positive condition, we might bid defiance to every fever of whatever name. There is but little doubt, however form or name, if any, that fever is taken by the breath. We inhale the contaminating effluvia and thus poison the blood, thereby preparing the way for fever to come in. It is stated that some one to test this matter created an artificial atmosphere, such as he supposed would cause fever, and on breathing it for a few minutes he had all the symptoms of fever.

I give the following prescriptions derived from various sources :

In fevers and inflammations, take 4 grains of powdered rhubarb in a little syrup of ginger at night just before going to bed.

ANOTHER.—Dried sulphate of magnesia 6 drams, sulphate of soda 3 drams, infusion of senna 6 ounces, tincture of jalap $\frac{1}{2}$ an ounce. This is for acute diseases generally. Take 2 tablespoonfuls every 3 hours till it operates freely.

ANOTHER.—Put 4 ounces of water into a bottle large enough for the purpose, then add 2 drams carbonate of ammonia, 1 dram of alum, and $\frac{1}{2}$ a dram of capsicum. In common cases of fever give an adult a teaspoonful once in 2 hours. Keep it corked tight and shake it well before giving it.

A tea made by steeping columbo root is good. Take a swallow of it occasionally.

Fevers constitute a large majority of the diseases that afflict mankind in the civilized world. For this reason I am more particular in pointing out the general treatment. One circumstance in fever has been generally overlooked by the popular mind. At the

commencement of all fevers there is a cold stage, sometimes rather severe and sometimes but slightly felt. In the cold or forming stage of fever, there is a general feeling of chilliness, though this chilliness may be but slightly felt. The skin is pale and harsh. There is a dullness and loss of mental energy, and indeed the patient feels weak both in body and mind. When this stage supervenes, promptness and appropriateness of remedies may prevent a long spell of sickness. Immediate attention should now be given and such domestic treatment administered as is within the reach of every family. I call your attention to these things, that you may be prepared and know what to do when occasion requires immediate action.

Give the patient a foot bath and some warm drinks as soon as it appears that he is "threatened with a fever." This cold stage may in rare cases continue for several days, with now and then a turn of slight heat, but usually it does not last more than twenty-four hours, and sometimes not as long as that. If prompt attention is given in this forming stage, the chances are that you will "break up the fever."

Immediately after this cold stage the skin becomes flushed, red, and disagreeably dry. This may be considered good proof that nature is hard at work trying to drive out the enemy—disease.—Let such remedies be given as will aid nature in the work she is doing. An emetic may now be given with good results. Spontaneous vomiting does not always clear the stomach. An emetic given early often arrests the further progress of the disease, and makes the patient well again. In case it is necessary to stop the vomiting, give the patient clove tea or cinnamon tea. As soon as yellow or green bile is vomited up, it is time to stop the vomiting. In such a case do not repeat the emetic.

The patient should never be allowed to lie in bed to vomit.—The twisting of the body either to the right or to the left causes much pain during the operation of an emetic. The patient should sit up square, with the body leaning slightly forward, so that the muscles of the chest and abdomen may be as lax as possible.—Much of the pain usually experienced in vomiting will thus be avoided.

Shortly after the vomiting ceases a purgative should be given. Calomel is frequently given in fevers, and almost every time does

mischief instead of helping the patient. I am not prepared to say it never does good, but the safe way is to let it alone. If the bowels are very torpid common purgatives may not operate. In such a case give an injection of tepid water once or twice a day. It is quite important that the bowels be kept open.

The skin must not be neglected. As soon as it becomes flushed and red, with a disagreeable dryness, it should be relaxed and the pores opened by freely bathing the whole body. It is a good practice to dash cold water over the patient at the commencement of the disease. This will moderate the heat and the thirst will not be so great. This will often prove more beneficial than any other remedy. In many cases it will cut short the fever and permanently cure the patient if resorted to soon after the acceleration of the pulse takes place. The pulse will be immediately lowered, and the symptoms of high excitement much abated.— This remedy may be safely employed any time during the first week, when the heat of the body is above its natural state. It will probably do the most good when the fever is at its height.— If the patient should feel at all chilly, or if there is any degree of perspiration present, this remedy should not be employed. Remember this and there will be no danger of using the remedy at the time of the greatest danger during the first week.

I make the following extract from Dr. Beach's "Reformed Practice," which by the by is an excellent work :

"A tenacious, viscid, perspirable matter is deposited upon the surface of the body in febrile diseases, which dries upon it and becomes an additional means of keeping the pores closed. The usual moisture being gone, a preternatural heat is generated which creates great distress, and protracts the fever. This obviously points out the propriety of *frequently bathing the surface*; it removes everything that obstructs perspiration, by relaxing the cutaneous vessels, and the evaporation that ensues diminishes the temperature of the body surprisingly. Nothing is better for this purpose than warm water with lye added."

I think there is good reason for adding the lye, but I would say do not put in much, and do not use a solution of potash or pearl-ash. The best way to get lye for this purpose is to put a sufficient quantity of clean wood ashes into water and let it settle. Then pour off the clear liquid, and put a little of it into the water you use for bathing the patient. This will remove the oily, gummy matter from the skin much better than water alone. It cleanses and softens the skin, and at the same time by its stimulating or relaxing nature, has a tendency to cause perspiration.

It is of great importance that perspiration should take place as soon as possible. Indeed the importance of this cannot be over-estimated. I have seen many very threatening cases of fever entirely broken up by thorough sweating. There are several ways of accomplishing this, by packing in a wet sheet, soaking the feet, drinking herb teas, etc. But perhaps the quickest, readiest and most complete way is by taking an old chair with the

bottom out, place a piece of narrow board across for the patient to sit on; then place a pail of hot water under the chair, and let the patient be seated after having been divested of all clothing; wrap a thick blanket closely around the patient to keep the steam in; have ready some stones heated hot, and put one in every few minutes till a good perspiration is produced. Care must be taken not to raise too much hot steam at once so as to burn the patient. Cold water should now be poured over the patient, or else he should be thoroughly washed with cold water, wiped dry and rubbed briskly all over. By doing this, you will entirely overcome the lassitude and exhaustion otherwise experienced. Pouring the cold water over is much the more beneficial. Any of the herb teas are useful as diaphoretic medicines. Ipecacuanha is useful as an emetic, diaphoretic, febrifuge or tonic. It may be safely used in all kinds of fevers.

Never disturb the patient when he is enjoying a natural and refreshing sleep. Even if it is time to give him medicine you had better extend the time or omit the medicine entirely for that time. It is much more important that the patient have refreshing sleep than that he takes his medicine precisely at the appointed time.

Never under any circumstances allow a patient with a fever to be bled. Bleeding in fevers is never beneficial but always injurious. It was formerly supposed that a patient having fever should be bled in order to moderate the circulation and prevent inflammation, but most well read physicians know better than that now. If you bleed the patient, instead of assisting nature, you abstract the chief element of life and power that nature is making use of to restore the sick one to health. All the advantage that bleeding can possibly give, can be secured by a judicious use of the simple remedies already mentioned. Open the natural outlets of the system, and get rid of only the impure matter that is really injurious, instead of the blood itself. This can be done by the use of emetic, sudorific, purgative and diuretic medicines. Blood letting is not really a remedy, for it always does more harm than good.

The patient should be kept where there is nothing to excite him or disturb him in body or mind. Let him rest and sleep as much as he can. This will give nature a chance to work to better advantage. Do not allow any morose, fault-finding, or complaining visitors, to see and talk with him. Promote cheerfulness as much as possible. A visit from some one who can bring an air of cheerfulness with him, will do more good than a dose of medicine almost any time. If the patient becomes anxious or depressed, contrive some way to make him cheerful, and if you can make him laugh, all the better. We have it on pretty high authority, that "a merry heart doeth good like a medicine." Do not confine the patient in a poorly ventilated room with sombre walls. The room should be large, well-ventilated, and be made to look as cheerful and agreeable as possible. The room should be kept just warm enough to be agreeable to the patient, and the temperature should be uniform—not hot one hour and cold the next.

In all stages of fever, slippery elm tea may be freely drunk.—For a change drink cream of tartar water, lemonade or ice cold water. Let the patient drink only a little ice water at a time, but he may taste it often if he desires to do so.

If the head aches severely, soak the feet in warm water and

lay cloths wet with cold water on the forehead or on any part of the head that aches most. As soon as the cloths begin to feel a little warm, change them for some just taken out of cold water.

The question now arises, "What shall the sick one eat?" I would say that in fevers very little nutriment is necessary. What little is necessary should be of the lightest kind. Strawberries, and almost any ripe and juicy fruit, may be eaten in small quantities. Let the patient eat part of an orange two or three times a day. A good preventive of fever is to eat an orange every day during the spring and summer months. Great care should be taken during convalescence. The patient should not eat too much. Improper eating and too much exercise often bring on a relapse.

Get the very best nurse you can find. Full as much depends on good nursing, as on what medicines are taken. Get some one for nurse who understands the business and will note every new phase of the disease. All favorable symptoms should be encouraged, and others counteracted. Every good nurse will know what to do, and when to do it. The nurse should be attentive, sympathizing and kind to the sufferer. Many little things that inexperienced hands would let pass unnoticed, an attentive nurse will heed and profit by. Much can be done that will be very grateful to the sufferer. By all means get a nurse who can divert the patients mind with cheerful and agreeable conversation. The nurse should watch every nerve of the sick one, and as far as possible, anticipate his wants. Never wait for him to ask you to do any necessary thing that you know should be done. Such services are very grateful to the sufferer, and do him much more good when he sees the nurse is prompt and attentive to his wants, and supplies them cheerfully. It is useless for me to enumerate the thousand and one little things that may be done for the comfort of the sufferer.

I have intended the preceeding remarks to apply in a general sense to all forms and shades of fever. Fevers, especially those of a typhoid nature frequently occur from the pernicious practice of storing large quantities of vegetables in cellars under the house. These vegetables decomposing their exhalations find their way into the family apartments. In such cases those who sleep on the ground floor are more likely to have fever than those who have their bed rooms farther up. My advice would be, never store vegetables under the house you live in.

Continued and Inflammatory Fevers.

The general notice of fevers just given, apply pretty well to these fevers, only in these fevers the symptoms are more distinctly marked, and in the inflammatory fever, more intense. In these fevers we have the slow and intermitting pulse. If the pain in the head, back, or loins is very intense and the pulse

slow. you may look for a case of more than unusual severity. Prompt and thorough measures should now be used, and if possible the disease broken up immediately. If allowed to run a day or two, it may be too late to break the fever.

The symptoms, though nearly the same as in common fever, already described, are more rapid, and if the disease is properly treated, terminates favorably in a week or a little more. When the crisis comes, the patient will most likely fall into a tranquil sleep. In such a case, let him rest as long as he sleeps soundly and tranquilly. The pulse will abate; vomiting, purging or sweating may occur. The disease often runs into typhoid fever—sometimes as early as the fourth day.

In the treatment of these fevers, observe the general rules of treating fevers. Give an emetic, and soon after, a cathartic. If necessary, the cathartic may be repeated every other day. Produce a free perspiration as soon as possible, and keep it up moderately during the continuance of the fever. For this purpose, and to induce sleep, give six grains of Dover's powders at night.

Typhus Fever, and Typhoid Fever.

Typhoid and Typhus fevers arise from unwholesome air, the air not unfrequently being poisoned by stagnant water or decomposing vegetables under houses, in the holes for politeness called cellars.

Fear has a great effect in spreading this disease. Were it possible to dispense with fear among the people, the ravages of cholera and other diseases would not be half as great as they now are. Typhoid fever is probably more prevalent in September than any other month in the year. In this disease, the first thing generally observed is a remarkable loss of strength without any apparent cause. The disease commences with cold symptoms of fever. The patient is sick at the stomach, and sometimes vomits

bile, he has violent pains in the head, back, loins, and sometimes about the region of the stomach. At first his tongue is white, but soon it appears brown or black, and in the center dry and chapped, with glassy, red edges. The teeth are covered with a brown or black crust.

Just how long the fever will last, is very uncertain. Sometimes it terminates in a week or two, or it may continue for five or six weeks, or even two months. If there is a gentle looseness after the fourth day, it may be regarded as a favorable symptom, especially if accompanied with a gentle sweat. Encourage, rather than stop this looseness and sweating, but do not allow them to become excessive. The great probability is that if this gentle looseness and warm, mild sweating continues for any considerable length of time, the fever will be carried off, but if the looseness becomes excessive, with inflammation of the bowels, and large black or livid blotches upon the skin, with cold, clammy sweats and involuntary stools, the symptoms are very unfavorable, and the patient will probably soon die.

In treating this disease, follow the course marked out in the general notice of fevers. Stop all food as soon as the head begins to ache. Drink lemonade, cold flax-seed tea or slippery elm tea. Slippery elm tea with a little lemon juice in it, is excellent. In the early stages of the disease, have a strong, healthy person rub the extremities after bathing. The water cure system is excellent in this disease. Give the patient a wet sheet pack once a day.

If the above treatment is not adopted, the following is the next best:

In the early stages give an emetic and follow with a cathartic, and induce perspiration in the usual way. Give three grains of ipecac twice a day in cold herb tea, and to insure sleep, give the usual dose of Dovers powder at night. The patient must sleep well, to get well rapidly. If there is too much looseness put 30 grains of gum camphor into half an ounce of balsam of copabia, and half an ounce of sweet spirits of nitre. Shake the vial and give ten drops once in two hours, until the tongue becomes moist, and the looseness of the bowels is not as great. The other symptoms to be treated as in the general notice of fever.

Fever and Ague.

In fever and ague we have a fair illustration of the origin and philosophy of all fevers that afflict the

human race. In this disease there is a positive and a negative condition. The condition of the atmosphere throws the temperature of the body into a negative state. This is the cold stage of the fever.—The warm or hot stage is the positive condition. Fever and ague, it will be readily seen, is caused by a positive and negative condition of the atmosphere. The fever and chills in the atmosphere correspond exactly to the fever and chill in the human system. Indeed we may say these chills and fever in the system are developed by the atmospheric chills and fever. The resisting power of the human body is so great, that this condition of the atmosphere may exist for a long time without overcoming the system so far as to cause a person to have the fever and ague.

It is quite generally believed that fever and ague is caused by something in the air, termed miasma, but nobody has ever proved this, by analyzing the air. Many suppose that this miasma is the cause of fever and ague, because the disease prevails most in marshy countries where there is wood and stagnant water, but this is a question upon which doctors disagree, many asserting that there is in reality no such thing or substance as miasma. The disease is most severe in places where great heat and moisture are combined. This is a strong argument in favor of those who claim the disease is caused by a condition of the atmosphere instead of a substance called mi-

asma. My own opinion is that there is some truth in both side of the question. No age, sex, or constitution is exempt from an attack of this disease.— Every one who breathes impure air, lives in low dirty places, takes little exercise and eats unwholesome food, is liable to have it.

The difference between fever and ague and other spasmodic diseases, consists more in degree than any thing else. As proof of this please notice that in all spasmodic diseases the same muscles are affected in the same manner, the difference being in degrees of violence and frequency. The following are the several forms of the disease :

In cases of fever and ague when the paroxysms occur daily it is called quotidian; when the paroxysms recur every other day, it is called tertian; when they recur every third or fourth day it is called quartan. The paroxysms of the quotidian are usually of longer duration than the tertian, and more likely than either of the others to lapse into a fever of the remittent type. The tertian is the most common, and the most easily cured. The paroxysm of this form of the disease is usually longer than the quartan but shorter than the quotidian. In speaking of paroxysms here I mean the whole time occupied by the cold, hot and sweating stages. The quartan form of the ague is the most difficult to cure, but it is the least frequent. The cold stage of the quartan is of longer duration than the same stage in either of the other forms. The quotidian form usually has the shortest cold and the longest hot stage. In either case the patient is affected with a sense of languor and general lassitude, the chillness not unfrequently being so severe as to cause the teeth to chatter, while the whole body shakes violently. The general symptoms of fever and ague are so well known that it is useless for me to describe them here.

Fever and ague seldom carries the patient to the grave, but in many cases it runs him so low that in his weak condition some other disease may step in and carry him off. In this disease the spleen is oft-

en enlarged, but why is not yet well known, if indeed it is known at all. Dropsy not unfrequently follows repeated attacks of ague. In cold or temperate climates one may have the ague for a long time without inducing other diseases, but in hot climates it is much more dangerous. Frequently, in hot climates, after a few paroxysms, inflammatory affections set in and the patient is carried off by some active disease, sometimes cholera, dysentery or convulsions.

If a person has been long afflicted with fever and ague with its accompanying headache and prostration, the most speedy cure will be effected by his leaving the section of country where the disease was contracted, and taking up his residence where the disease does not prevail, but this is not always a convenient remedy. If he cannot leave, let him be more careful in his diet, and have more complete control of his appetite. Eat no gravy or fat meat, and but very little butter. All hot drinks should be discarded. It is well to take plenty of exercise, but do not continue it so long as to become fatigued.

When you feel a chill coming on, resist it with all your might, mind and strength. Do not lie down and cover yourself to keep warm; do not seat yourself near the fire to shake and shiver, but do what is much better, get up on to your feet and walk fast or enter upon some gymnastic exercise, be lively and thus bring up the arterial circulation as much as possible. You are cold because too much of your blood is in your veins, and consequently too little in the arteries. The arteries being deprived of their customary warmth and magnetism, a chilly sensation is produced over the whole body. This being the case, it is not wise to wait for the slow reaction which is sure to bring on unnatural heat and prostrating fever.

For breaking up a chill, put a tablespoonful of fine salt into one gill of the best brandy. Mix it thoroughly. Drink a wine glass full as soon as you begin to feel the chill coming on. Immediate relief will follow if the above is taken, even after the chill has fairly commenced. Sometimes a wine glass full will not be needed, and sometimes it may be necessary to repeat the dose.

For a few days previous to an attack of fever and ague a close observer will notice symptoms that should be immediately attended to. When these symptoms occur, prompt attention and proper remedies will usually arrest the disease before the occurrence of a paroxysm. I have already given what I consider the best plan, but I will give one other mode of treatment which I consider next best.

Among the first symptoms of approaching ague, will be found a sense of weakness and great listlessness. The patient gets "all tired out," when he has exercised only a very little. He feels a desire to yawn and stretch. His mind becomes anxious, and he wants to lie down and rest even though he has not exercised half as much as usual. Cold chills are occasionally felt followed by hot flushes in the face. There is pain all over the body but especially in the head and back. Whenever these symptoms occur, it is time to act. These symptoms may be taken as a notice given in advance, that the ague is coming. The patient may now take a hot foot bath. Let the water be as hot as he can bear it, and mix in it new wood ashes. Use hot drinks while taking the foot bath. Let me repeat that I do not consider this method as good as the first one given. If the patient has eaten a hearty meal, an emetic may be given.

Another method of treatment which is not very troublesome, is as follows :

Put half a teaspoonful of carbonate of ammonia in with six grains of Dover's powder in a cup of herb tea. Let the patient drink this as hot as he can bear it.

Still another prescription. called good :

Put a teaspoonful of iaudanum and a teaspoonful of sulphuric ether in water and drink it an hour before the expected attack.

In my practice I have frequently used the following with good success :

Gather a little pile of cobwebs, be careful and pick out all the flies and other insects that may be found caught in the web.—Take a pair of scissors and clip the web up fine. When this is done, take about enough of these fine clippings to make a common sized pill, but instead of making it into a pill, stir it well into a tablespoonful of molasses. This makes one dose. Take one dose every half hour for three or four hours before the expected attack. Let this be repeated at the proper time before the paroxysm is expected to occur. Continue the use of this remedy as long as the paroxysms occur. Instead of putting the web into molasses, you can mix a little mucilage with it and make it into pills, if you prefer to do so. This remedy is so simple that many think it is of no use, but I have seen it tried so many times with good success, that I call it much better than some more complicated remedies.

In regard to diet, I have but little to say, and that little is easily understood. Eat but very little, and that of easily digested food. Indjudicious eating often causes dangerous relapses.

I consider calomel and quinine worse than useless, and if you take them, remember that it is contrary to my advice.

Bilious Fever.

The remittent fever, commonly called bilious fever, differs from the intermittent in having but a short remission of the symptoms, and the patient has some fever all the time. The remissions not unfrequently recur twice in twenty-four hours. If the disease is unchecked it may run ten days or a fortnight, with more or less severity. The symptoms are the same as in general fevers only more marked in the different stages. After the disease has been running a week or more, the skin often assumes a yellow tinge, and there is much heat.

The fact that a person is bilious, is proof that the system is radically impaired. Congestive fever is very much like remittent fever, only the first symptoms are more marked and decidedly more alarming. In the cold stage the pulse is feeble and the extremities are more than usually cold. The coldness increases and the pulse diminishes until you cannot feel them at all. A cold, clammy sweat usually covers all of the body except the chest. In almost every case there is great thirst, but the stomach rejects everything that is swallowed. The patient is restless, wild and delirious, but does not suffer much pain. Observe the following plan in treating this disease:

An emetic is the first thing in order—if given in season, it will frequently cut short the disease. As soon as the vomiting ceases,

give a purgative. If necessary, repeat the purgative every other day or every third day, but do not give large doses.

Resort to the usual methods of obtaining perspiration. In the general notice that I have given for treating fevers you will find proper directions for this.

The following is excellent in all bilious diseases :

Pulverize equal parts of dried mandrake root, orange peel and cloves. Take two tablespoonfuls of this composition, and put it into one pint of brandy and one quart of water. Then add one pound of brown sugar and a few drops of lemon juice. Shake it up well, and let it stand a week, when it will be ready for use.—Take one teaspoonful before each meal. If the medicine is needed immediately, give it an extra shaking and it will do to use the same day it is made, but if possible it is better to have it stand a few days.

Yellow Fever.

This is simply bilious fever in a more concentrated and highly aggravated form. It prevails most in hot climates and especially in southern cities, and large towns. The hotter the weather the more fatal the disease. With the approach of cold weather, yellow fever retires from the stage of action and does not return till another heated term comes. The same treatment recommended for fevers in general, and for bilious fevers, will be suited to yellow fever.

Yellow fever being such a dangerous disease, it is very important that the primary disease receive prompt attention. A little delay may send the patient to his grave. If the fever is epidemic it is not safe to neglect even the slightest symptoms. Either dullness, weariness, pain in the head, neck, or back ; or, if the person feels a chilliness, should be attended to immediately. I would advise the unacclimated not to remain in a town or city where yellow fever is epidemic. Those who live where yellow fever is prevalent, should eat an orange every day and drink freely of lemonade ; and by all means get plenty of sleep.

Scarlet Fever.

This fever begins as all other fevers do, but in two or three days the whole skin is covered with red blotches. These blotches are more numerous, larger,

and usually redder than the measles. This disease should be treated nearly the same as other fevers.

If you know that any member of your family has been in the presence of those who had scarlet fever at the time, give him three drops belladonna in a wineglass of water, every morning before breakfast. As long as the patient is confined to the room burn a little coffee in the room every day. Let the patient sleep with the head more elevated than usual.

For sore throat attending scarlet fever, gargle the throat with warm water in which there is a little vinegar and salt. If the bowels are costive, give a small dose of castor oil. The whole body should be frequently bathed with some cooling liquid, and gently rubbed with the bare hand.

Measles.

This disease is in many respects like the scarlet fever; indeed it arises from similar causes. Among the first symptoms, will be noticed the running of water from the eyes and nostrils. The patient will sneeze frequently, and there will be swelling of the eyes and face. There will be considerable drowsiness, with occasional shivering. The first appearance of the eruption usually occurs on the third or fourth day, behind the ears, thence spreading downwards on the neck, and forward on the face. It seldom appears on the body in less than twenty-four hours from the time it comes out on the face. The eruption looks much as if the patient had been bitten all over with fleas; it is of a crimson color, instead of scarlet as in scarlet fever.

In measles, the specks usually array themselves in groups, and the skin between these groups retains its natural color. Young people in good health seldom die with this disease, but it is very destructive

when it attacks sickly children, and those who have been poorly fed and clothed.

In measles, the abundance of the eruption and the severity of the disease is not considered very dangerous. The patient usually has a great difficulty of breathing, and not unfrequently a violent cough, but even these are not so very dangerous. The great danger consists in the secondary inflammation that comes after the fever and eruption have passed away. This usually happens about the ninth or tenth day. Now is the time to exercise care and judgment. If you cram the patient with strong food, you will greatly increase this secondary inflammation and endanger his life. When he begins to recover, you will undoubtedly feel like giving him strong food to strengthen him. I warn you to be careful. Let him eat but little, and that of some light easily digested food. Very little medicine is necessary at any time during this disease. Bathe the body frequently, and counteract restlessness, headache, cough, &c., with the usual remedies. In this as in all other fevers, the room should be well ventilated. This should not be neglected.

Painting on Glass.

The only difference between ordinary painting and painting on glass is, that in the latter all transparent colors are used instead of opaque ones, and the

colors being ground up with turpentine and varnish instead of oil. In painting upon glass, it is necessary occasionally to place the picture between the artist and the light, to enable him to see the effect, the light having the property of casting a yellowish tinge upon all colors so exposed.

To persons having a knowledge of coloring, this is easily learned, and affords a handsome remuneration.

To Soften Hard Water.

Put a very little lime into a barrel of hard water, and in about an hour stir it up. Then let it settle. Another and a better way is to boil the water and then leave it exposed to the atmosphere. This will also purify river water. Please write this down in your memory, and sometime it will be of use to you. Simple things are occasionally important things.

Patent Gold and Silver Counterfeit Detector.

Take one ounce nitrate of silver, pure crystals, and one quart pure rain water. Add together, shake well, and it is fit for use. To be put up in drachm vials, and sold for twenty-five cents a vial.

I once met a man selling this on the streets in Cincinnati. He sold it very readily. I saw one man pay him ten dollars for the recipe. The mixture turns black when applied to counterfeit silver, and green when applied to counterfeit gold.

Paste that will Keep.

Dissolve a tablespoonful of alum in a quart of warm water.—When cold stir in as much flour as will give it the consistency of thick cream, being particular to beat up all the lumps, then stir in as much powdered rosin as will stand on a dime, and throw in half-a-dozen cloves, to give a pleasant odor. Have on the fire a teacupful or more of boiling water, pour the flour mixture into it, stirring well all the time. In a very few minutes it will be of the consistency of mush. Pour it into an earthen or china vessel; let it cool; lay a cover on and put it in a cool place. When needed for use, take out a portion and soften it with warm water. Paste thus made will last twelve months. It is better than gum as it does not gloss the paper and can be written on.

Butter.

Dairymen who know more about making butter than I do, say that the yield of cream is much greater from a certain quantity of milk if it is put into large shallow pans so as to not be more than two inches deep; better have it less than more than two inches deep. Those who can get plenty of clear cold spring water, will find it to their advantage to put a little in the pans before the milk is turned in. Set the pans on the shelves or in some convenient place. Then put in about one fourth as much of the clear cold spring water as you intend to put in of milk. After the water is put in, pour the milk in, and let it stand twelve hours. Then skim. You can set the pans on the shelves before the milk is poured in or immediately after. There are two good reasons why you should put the cold spring water in the pans. You get more cream and it is better. Butter made from such cream will have none of the strong taste arising from leaves and coarse pastur-

age. The water cools the milk so that the cream commences rising immediately, and therefore, has time to rise, even in warm weather, before the milk begins to be sour.

In order to make good butter observe the following rules.

Never set cream to rise in a damp cellar. If you do the cream will be injured, and give the butter a mouldy, unpleasant taste.

If the milk is allowed to stand too long before being skimmed, the butter will have a disagreeable taste. I hardly know how to describe the taste unless I call it cheesy.

When the cream is kept too long before it is churned, the butter will have a sour, mouldy, cheesy taste. Therefore if you want good butter churn in season.

Good butter has a pleasant aroma quite essential to the taste. If you wash the butter in water you will destroy this beautiful aroma.

Do not take butter in your hands. The warmth of the hand is slight, but still sufficient to melt a portion of the globules. This will give it an oily taste. Many find their butter becomes rancid in a short time, and wonder what the cause is. Butter that has been worked with the hands always becomes rancid much sooner than when worked without a touch from the hands.

Milk should be set in dry, open, airy places. It should never be put in a cellar unless the cellar is dry and well ventilated. Of course it should be in a cool shady place, but if possible that place should be above ground.

In warm weather milk should be skimmed in twelve hours. It may then set twelve hours longer and then be skimmed again, but do not stir the pan at the first skimming. If you want to make good butter in warm weather, churn every morning. In cold weather the cream may be kept longer.

When churning keep the cream about as warm as the milk when first drawn from the cow. This will cause the butter to come more readily.

Butter should be taken from the churn with a wooden ladle into a wooden tray. Before using, the tray and ladle should be well scalded and then cooled with cold water. The salt should be well worked in, but in no case should the butter be touched with the hands.

In looking over my recipes I find the following, which I have never tried, and don't know of any one who has, but as it may prove useful I give it a place:

Rancid butter may be restored by melting it in a water bath, with some coarsely powdered animal charcoal, and strained through flannel. The charcoal used should be thoroughly sifted from dust.

You can preserve butter for any length of time by carefully following these directions :

In the first place carefully work out all the buttermilk you possibly can, and use rock salt. Then pack the butter in air-tight jars or cans. It is quite essential that the jars or cans should be air tight.

I am told that butter carefully prepared as above, and kept in a cool place, will be as good in two years as it is the day it is put into the jars. If this is the case, it is of considerable importance.

During the warm months of summer, merchants have a chance to take in more butter than they can sell. When they have no jars or cans that can be corked so as to be air tight, the best plan is to pack the butter as above, filling the jars up within two or three inches of the top, and then pour on enough strong brine to fill the jar full. Instead of the brine, some lay a thin cloth over the butter, and then cover it about half an inch thick with common salt. The jars should be placed in a dry, but cool cellar. If the cellar is dry and the bottom of it sandy, a good plan is to dig holes in the bottom of the cellar, just deep enough and large enough to put the jar in and have the top of the jar come up just above the surface. Then pack the sand around the jars as closely as you can. Then put a board over the jar to keep the dirt out. Do not dig a hole in the bottom of the cellar and put the jar in, unless the bottom is sandy and dry. Never put two lots of butter in the same jar because when different lots of butter are mixed, the whole is quite likely to be spoiled. Never pack butter in kegs if you can get jars enough, but if you must use kegs, let the outside be well painted.

Purchasers of butter will do well to refuse that in which there is much water. The water can usually be seen exuding from the bad samples.

If you have on hand a lot of butter which is too salt for use, churn it with new milk in the proportion of one pound of butter to one quart of milk. Churn it and work it over, the same as you would fresh butter.

A bad lot of butter may be greatly improved by first dissolving it in water just hot enough to melt it ; if the water is very hot it will make it oily, and not be as well. Let it cool and then skim. Then add a little new milk and churn again.

Fruit.

There are many ways recommended to preserve fruit in a state of soundness, and make it keep its original color and flavor. If the following is not the very best, I think it is at least as good as any now in use :

Put 1 pound of rosin, 2 pounds of tallow and 1 ounce of bees-wax into an iron kettle. Place over a slow fire and let the ingredients dissolve, but do not let it boil. For preserving oranges, lemons, apples and pears, take each one separately and wipe it carefully with a dry cloth. Then rub it over with fine chalk, to prevent the coating from adhering to the fruit, and dip it into the solution while warm, but not hot. Do not let the fruit remain in the solution, but simply dip it in once. Hold it up a moment to let the coating get a little dry. It may then be carefully packed away. In dipping the fruit hold it by the stem with the thumb and finger if you can, if not, loop a small thread around to hold it. Apples and pears may be packed away in boxes or barrels, but oranges and lemons should be placed on shelves far enough apart to not touch each other. This same composition may be used for sealing up air-tight cans and jars. Sound fruit may be put up in air-tight vessels without being coated over with the composition. I think it is better to put fruit up in air tight cans than to coat them over with any kind of a composition.

Good sound, ripe fruit is positively conducive to health and should be eaten freely, especially in warm weather. Apples, peaches, cherries, wild berries, &c., instead of being injurious are very beneficial. The maladies that many suppose to have their origin in a free use of fruit, would not be as prevalent and destructive, if fruit were used still more freely. Unripe and unsound fruit should not be eaten. If you have an apple, before you eat it, pare it, take the core out and cut out all the bruised and decayed spots. Do the same with peaches, pears, &c. Ripe melons may be freely eaten. Never eat any fruit that is not ripe and sound.

If every one would make it a rule to eat one orange every day, in warm weather and one apple every day in cold weather, there would be much less sickness in the country, but I would not restrict you to eating only one—eat more, but only eat when you need food and let the fruit take the place of other food.

The reason that summer fruits do so much mischief is because we eat as much as we need of other food and then cram ourselves with fruit because it tastes good. The fruit would not have injured us, if we had not eaten too much of something else. When we eat freely of fruit, we should not eat as freely of other food. Ripe currants are especially good food. Never eat any kind of fruit or anything else just before going to bed. It is best to not eat any fruit after supper.

To Remove the Smell of Paint.

Put one ounce of oil of vitriol in a bucket of water and place it in the room just painted. If necessary, renew occasionally. This will destroy the disagreeable odor so that you may remain in a newly painted room without noticing the difference between that and one that has been painted for a long time.

An Infallible Remedy.

Every intelligent physician knows that no such remedy has yet been discovered, and the great probability is that no such remedy will ever be found.— There is no medicine that is sure to cure in every case. The human system demands good treatment, good nursing and, proper dieting, and frequent bathing. If any one supposes that a remedy can be found to cure disease when all these are continually neglected, he is greatly mistaken. He who is continually over-eating and indulging in forbidden luxuries, will suffer in spite of any remedy that may be offered. Violate the conditions of health, and you will suffer the consequences.

Always breathe pure air if possible. Impure air has a great tendency to vitiate one's habits of thought. Breathing impure air not only injures the physical health, but has a great tendency to make one morally mean. Sleeping in small tight rooms with the doors and windows closely shut, is very injurious to the physical and moral condition of the sleeper. Unpleasant dreams are not unfrequently the result of the foul air of the bedroom. Florence Nightingale, who went as volunteer nurse, and whose services

were very acceptable in the Crimean war, writes as follows:

"An extraordinary fallacy is the dread of night air. What air can we breathe at night but night air? The choice is between pure night air from without and foul night air from within. Most people prefer the latter. An unaccountable choice. What will they say if it is proved to be true that fully one-half of all the disease we suffer from, is occasioned by people sleeping with their windows shut? An open window most nights in the year can never hurt any one. This is not to say that the light is not necessary for recovery. In great cities, night air is often the best and purest air to be had in the twenty-four hours. I could better understand shutting the windows in towns during the day time than during the night, for the sake of the sick. The absence of smoke, the quiet all tend to make night the best time for airing the patient. One of our highest medical authorities on consumption and climate, has told me that the air in London is never so good as after ten o'clock at night. Always air your room, then, from the outside air, if possible. Windows are made to open, doors are made to shut—a truth which seems extremely difficult of apprehension. Every room must be aired from without, every passage from within, but the fewer passages there are in a hospital the better."

Here we have much sense in a few words. Henceforth let my readers sleep in well ventilated rooms.

No one should eat a hearty meal just before going to bed. If you have eaten a hearty meal for supper, or if you have eaten anything a short time before retiring, it is better to go to sleep on the right side;—but if you have eaten only a light supper, and that was eaten two or three hours before bed time, you may go to sleep on either side, or on your back if you choose. Some medical writer gives his reason for sleeping on the right side, in substance as follows: I quote from memory.

"If you sleep on the right side the stomach is very much in the position of a bottle turned upside down. This gives the contents of the stomach a chance to pass out more readily than if you are laying on the left side or on the back. If you sleep on the left side the contents of the stomach pass up instead of down, in which

case gravitation hinders instead of aids in the work. If you have eaten a hearty meal and go to sleep on the back, the weight of the food rests on the great vein near the back bone and hinders the flow of blood. The partial arrest of the blood disturbs the sleep and causes unpleasant dreams. If the meal was eaten only a short time before retiring it is more likely to do mischief. Various sensations are produced. Large or hearty meals eaten just before going to bed, frequently cause nightmare, which sometimes causes death."

If possible always sleep with the mouth closed, so the air will pass through the nostrils.

Bed rooms should always be so constructed that the head of the bed may be towards the north. Some years ago I was in very poor health. Before I had ever read or heard anything on the subject, I found that I rested better when my head was towards the north. This led me to investigate the matter more closely. To test the matter I would sleep one night with my head to the north, another night with my head to the south, then with my head to the west, and then to the east. Sleeping with my head to the north I rested best, and then next best as follows: south, west, east. Since then I have heard various reasons given why one should sleep with his head to the north, none of which are satisfactory to me. I simply give the facts in the case. Why it is so I know not. Since I have regained my health, I cannot realize any difference whether I sleep with my head to the north or in some other direction.

Weak and sickly persons will often be more benefitted by a change of scenery than by swallowing a cart load of medicines. If you are in poor health,

and consequently despondent, gloomy and sad, start off on a journey, see new things and form new acquaintances.

Costiveness.

The passions of the mind exercise a great control over this complaint. He who is constantly complaining and fretting will soon run himself into a state of poor health, with costiveness as one of his ills. Cheerfulness is the first remedy I would recommend. Surround yourself with beautiful scenery and live among cheerful companions as much as possible. Try to make others happy. Health, virtue, happiness, and beauty belong to the same family.—They are fond and firm friends, and like all true friends mutually improve each other.

A person may be costive for a long time without seriously injuring his health, but it is not well to let the complaint run too long. The following hints and directions will be of great use to those who heed them :

Never procrastinate the hour of obedience when nature calls.—Such procrastination often brings on costive habits, and if persisted in may lead to serious results. Every person should have a regular daily passage. Probably the best time for this is at rising in the morning, or immediately after breakfast. But if your daily duties make it inconvenient to attend to this function at that hour, then adopt some other hour, but by all means have some particular hour to attend to nature's demands. Always be there at the appointed time, and make an effort to have a passage of the bowels. In this way you will soon teach the intestines to respond promptly at that period. If you have for a long time been in the habit of putting off these calls of nature till you are very costive, you may have to make quite a number of trials before you succeed in establishing regularity, but the utmost system and regularity are required. By negligence and procrastina-

tion you call in many evils and aches. If I can make you understand the importance of regularity in going to stool at the usual time, I shall easily induce you to adopt that practice.

Persons who lead a sedentary life and those who have been long troubled with costiveness should eat pretty freely of Graham bread and apple sauce, especially for breakfast. Persons whose occupations keep them within doors most of the time, should not eat meat more than once a week nor warm biscuits more than twice a week, and then not for supper. They should not drink coffee at any time.

In long continued or obstinate cases of costiveness, stir one tablespoonful of corn meal or Graham flour into a large tumbler of water and drink it at least half an hour before breakfast. Repeat the dose every morning as long as necessary. Those troubled with costiveness should never eat anything between meals, unless it is figs, apples, peaches, or some other sound, ripe fruit. The mind has such complete control over this complaint, that any one able to be up and doing (if he has an ordinary supply of mental strength) can follow these directions I have given, and be cured without taking the first dose of medicine.

Piles.

To some extent this disease can be controlled by the mind, but perhaps not as completely as costiveness, though it is by no means an incurable disease. The disease is wide spread and well known. There are many forms and painful symptoms of this disease. The four most prominent and distinct forms are,

1. Blind Piles;
2. Mucous Piles;
3. Bleeding Piles,
4. Exerescencial Piles;

The first form consists in a distension of the membranes and vessels within the rectum.

In the second form there is a discharge of mucous or pus that exudes from the abraded surface in the rectum. These excoriated places are frequently mistaken for ulcers.

In the third form there is considerable pain and uneasiness.—During evacuation there is usually some discharge of blood.

The fourth form is much more difficult to cure than either of the others, but still it is not incurable. In this form of the disease there will be fleshy tumors in the upper part of the rectum. These are usually removed by surgical operation, though as a general thing I think there is a better way.

Not unfrequently piles originate from mental disturbance. Long continued excitement or great anx-

iety in any direction may cause a person to have the piles. In severe cases the patient must be kept mentally and physically quiet. If this is neglected other remedies will be of but little use. The remedies for this disease are almost innumerable, but they often fail because of mental excitement, or it may be sorrow and anxiety of the patient. Everything that has a tendency to make the patient mentally uneasy or discontented should be carefully avoided. Observe the following directions for treatment:

The regularity recommended in cases of costiveness are to be observed more closely, if possible, in this disease. Never read or think intently while engaged in the function of evacuation. In case the lips of the anus protrude, as soon as you are through the operation lean forward and carefully press them back within the orifice. This should never be neglected. Always put the protruding part back to its proper place, and you will altogether likely avoid the necessity of any surgical operation.

Hydropathic treatment in cases of piles is far better than ointments and drugs. Daily ablution with hand friction should not be neglected. Many have been cured by taking sitz-baths after stools, and every time the pains come on. Remain in the bath for twenty minutes, unless the pains leave you sooner. Wipe dry with a coarse towel, and then rub with the bare hand. The water should be neither very cold nor very warm, but just of the right temperature to feel comfortable, though it better be too cold than too hot.

There is undoubtedly much superstitious folly about charms, but to show that the disease is to some extent controlled by the mind, I will mention this fact. In my travels around the country I have met a number of persons who carried a horse-chestnut in their pockets as a guard against this disease. They claimed that as long as they carried the chestnut in the pocket the disease would not trouble them, but

if they omitted it even for a few weeks, the disease would come on again.

In the winter of 1860 and 61 while traveling in Pennsylvania, I formed a slight acquaintance with a man who had carried a horse-chestnut in his pantaloon's pocket for years. He said if he had the misfortune to lose his chestnut, and go without it for a week or two, he would begin to suffer from the disease. But on putting another one in its place, the trouble would be removed and he would be well again.

Though I am not much in favor of giving drugs and using ointments in this disease, I will give the following recipes for the benefit of those who may like them better than to use common sense remedies :

Mix together 4 ounces of hog's lard, 2 drams camphor, and $\frac{1}{2}$ an ounce of laudanum. Apply every night on going to bed.

A more simple ointment and one that I think is just as good, is tallow. Mutton tallow is best. Apply in the usual way.

A medicine to take internally is made as follows :

Take equal parts of cream of tartar, jalap, senna, flowers of sulphur, and golden seal. Put the whole together in a mortar and pulverize thoroughly. Take a teaspoonful in the morning before breakfast, and one at night before going to bed.

Here is an external remedy highly recommended :

Make a strong decoction by boiling the inner bark of white oak. Bathe the rectum with this every night.

Almost any kind of oil or tallow is good as an external remedy. Olive oil is said to be very good.— Indeed most of the virtue in the ointments in common use is the oil or grease in them. The following is a simple and cheap remedy :

Mix 1 teaspoonful of sulphur in a tumblerful of milk. This makes one dose, and should be taken every morning before breakfast for a week. Then take a dose once or twice a week as occasion requires.

None of these remedies will be of much use without regularity, proper diet, and cleanliness. You may spend hundreds of dollars for medical advice and take drugs by the quart, but if you neglect regularity and cleanliness you will continue to suffer.

Mumps.

This disease is contagious, and sometimes epidemic. In this disease the glands of the throat and neck swell, and in many cases cause considerable difficulty in breathing, and make it almost impossible to swallow.

If properly managed this is not a dangerous disease, though it requires some care and attention.

The bowels should be kept open. The patient should remain in bed most of the time, and be very careful not to take cold.—Drink warm catnip tea, and have some one gently rub the swollen glands. Bathe the part with spirits of camphor half a dozen times or more every day.

Should the disease settle to the testicles or other parts, use sudorific medicines pretty freely, and apply slippery elm poultice to the part affected, but if care is used there is no danger that the disease will settle.

Epilepsy.

This is caused by some disordered state of the nervous system, usually commencing in the brain, but spreading over the whole system causing a violent convulsive contraction of the muscles of the extremities. The muscles of the eye, tongue, lower jaw and bladder contract violently. These symp-

toms are attended with a foaming at the mouth, and total loss of sensation. Apparent sleep follows, and as soon as the patient becomes sensible again he complains of heaviness of the head and general weariness. Sometimes these fits come on suddenly, but usually the patient has warning in such symptoms as pain in the head, unusual weariness and great dimness of the eyes.

This is indeed a frightful malady, and during the fit the patient should be closely watched and great care taken to prevent him from injuring himself by the great violence of his struggles. Observe the following directions in an attack of this kind :

Put a piece of wood between the patient's teeth, and use the utmost care to prevent the patient from biting his tongue. Immediately loosen the clothes and elevate the head. Do not give the patient any cup or glass to drink from while the convulsions last, but any other time when he is thirsty give him a cup of butter milk. Over eating or drinking strong liquors often cause the disease, in which case an emetic may be given.

Persons subject to this disease sometimes have what they call "hungry spells." It seems to them that they must eat something and that immediately. When these hungry spells come on be very careful and not eat too much. Probably it would not hurt you to eat a little, but if you yield to the temptation of your appetite and keep on eating till you do not want any more, you stand a great chance of bringing on a shock of epilepsy.

This disease is often called "Falling Sickness." A shower bath should be given every day, after which the patient needs rubbing with the hands of a strong healthy person. Purgatives may be given once or twice a week, but not oftner. Avoid excitement.

This disease often arises from indigestion. When this is the case let the patient adopt a strict system of diet. Never eat anything between meals, not even an apple or pea nut.

Very little medicine is needed in epilepsy. An emetic or purgative may be given as before stated, but further than that I would not recommend any medicine.

Salivation.

This is very much the opposite of thirst. There

is an undue flow of saliva. This is caused in various ways. In order to cure this complaint, find out the cause and remove it.

Salivation is often produced by using mercury as a medicine. If the patient is exposed to the cold or drinks strong drink or very cold water, the danger is still greater.

To stop this inordinate flow of saliva, keep the body cool but not cold, live on light food, and keep the bowels regular. If anything further is necessary, mix two drams of bruised nut-galls in a pint of warm but not boiling hot water; keep it warm and stir it frequently for three hours; then strain and sweeten. Use this as a gargle to wash the throat and mouth, but do not swallow it.

When salivation is caused by smoking or chewing tobacco, quit the vile habit and use the above gargle.

Here let me enter my protest against the use of tobacco in any form or shape. I have no long lecture to give, but it is undoubtedly true that many of the ills that flesh is heir to arise from the worse than useless habit of using tobacco. Unless care is taken frequent smoking will first turn the teeth yellow and then black. The habit is not as injurious to persons who are healthy, corpulent and phlegmatic. Delicate persons cannot stand the waste of the fluids as well as the healthy and corpulent. Smoking and chewing have a tendency to impair the mental faculties. Many a man has found his memory growing weaker and weaker, without once thinking that he was spitting it away with his filthy tobacco juice.

Nettle Rash.

This disease begins with the usual symptoms of fever. On the second or third day small reddish spots make their appearance. These spots look as though the skin had been stung by nettles, but in the day time they are hardly visible. At night they return usually accompanied with fever. In a few days small scales come off.

If the attack is very severe give an emetic and follow it with a purgative. Let the diet be light and give the patient cooling drinks such as lemonade.

Dyspepsia.

Dyspepsia and despair usually go together. Whatever is good for one is good for the other. Cheerful companions and pleasant surroundings will do much to drive dyspepsia from the system and despair from the mind.

Literary men, lawyers, divines, and all who lead sedentary lives, and unnaturally tax the brain, are most likely to suffer with this disease. All such should so manage their time and affairs that they can have frequent opportunities for proper and healthful exercise. If at times you feel your food lie heavy on the stomach, you may know you are on the road to indigestion. This may be accompanied with flatulence and belching, but the inconvenience at first will be only temporary. In a day or two the patient may be as well as ever, but if these symptoms recur often, the patient is traveling fast towards dys-

pepsia. The more frequently these symptoms recur the more difficult the disease will be to cure. After awhile the mouth becomes clammy, and the tongue white or of a brownish color. Soon the appetite is impaired and there is more than usual thirst, while even in warm weather the feet may be uncomfortably cool. These are the first symptoms of indigestion. Then come the more marked and strong symptoms. There is much languor and feebleness both of body and mind. Exertion of any kind is painful, and any great mental exertion is particularly oppressive;—wandering pains are felt all over the body, and the belchings which before were slight, now become stronger and decidedly disagreeable. If the patient gets any sleep at all it is disturbed by unpleasant dreams. The patient looks pale and is, very likely, troubled with headache and dimness of sight. Many little objects float before the eyes especially when the patient is half a sleep. Not unfrequently ringing noises are heard in the ears, and if the patient is not fretful and irritable it will indeed be a wonder; he may get the reputation of being cross and hateful.

As an improper diet often brings on this disease, a proper diet will send it off. Not one dose of medicine is needed. The first thing to be attended to is out-door exercise. Eat all your meals at exactly the same hour each day. Eat nothing between meals. Use no tea, coffee or tobacco in any shape or form. Drink no spirituous or malt liquors. Avoid everything that will cause great anxiety. It is not necessary for you to starve yourself but you should not eat highly seasoned food nor over-load the stomach with any kind of food. If you are dyspeptic let me advise

you to eat no hot bread or biscuit. The more simple the diet the better. Eat only a little and chew it well. Eat so little that you will be really hungry when the next meal time comes around. Do not eat simply because it is time and the meal is ready. Your physician may tell you to eat only a little and eat often, but that is just what does the mischief. Never eat anything till you are hungry and then do not eat fast or much. There is no danger that can arise from going without food till you are hungry. If you drink anything let it be a little warm water, which you may sweeten a little and put in a little milk if you choose.

If you often feel heat in your stomach, wet a piece of flannel in cold water and wring it a little but have it quite wet. Lay it over the stomach and put a dry cloth over that to prevent wetting the clothes. This may be put on any time during the day or night. The best time to put it on is at night when you go to bed, and leave it on till morning. When you take it off bathe the part with cold water and wipe it dry and if you then rub it briskly with the hand, it will be all the better.

The great trouble with dyspeptics is, they eat more than twice the food they need. Please remember this and profit by it. If you eat so much at one meal that you do not feel hungry at the next meal time, either skip that meal entirely or eat less than before. Eat only such food as digests easily. If you suffer after meals keep lessening the quantity till you feel perfectly comfortable after eating.

Do not expect to be perfectly cured in one week or one year.—Please remember that for years you have been filling your stomach with improper food, and even when you ate proper food you ate too much. Commence now and live more as you should live. Many practice a system of diet for a week or two, and then because they are not cured, give it up and fall back into all their former improper indulgences. If you expect to succeed you must persevere. If you go to a Christmas party or some other party where there are many nice things to eat, you will very likely conclude that "just for this once" you will eat what you please, and as much as you please; but I warn you to be careful. One evening of over indulgence may set you back more than a whole month of careful dieting has set you forward.

Dyspeptics are quite apt to eat as much as they need of common food, and sometimes more, and then finish up with a large piece of pie and a taste of all the dainties on the table. If they would omit all of the common food, and eat no more than the usual amount of pie and dainties, it would not be as bad for them. Indeed, I do not think the puddings, cakes, and pies are really so injurious, it is the over eating that does the mischief. The principal merit of Graham or brown bread is in the fact that we eat it slower and do not eat as much of it. Warm bread and biscuits hurt us because we eat them too fast and butter them too much. I recommend plain, simple food because I know you will not be as likely to eat as much of it as you would of food more highly seasoned.

The habit of eating between meals is particularly injurious.—Many dyspeptics eat more than enough between meals, and then eat as much as a laboring man needs at the usual meal time.—

Raisins, apples, Candy etc., are not so injurious in quality as in forcing the system to take them in when it has more than it needs of something else.

I have now given directions and suggestions which, if followed, will be sure to cure your dyspepsia and make you well again. I am almost tempted to stop here and say nothing about the medicines often used to cure dyspepsia, but I will give a few of the least harmless remedies, at the same time telling the reader that the better way is to cure the disease without medicine.

Take equal parts of powdered rhubarb, socotrine aloes, and scammong. Mix well and add a few drops of thin gum water.—Make into pills about one-third the usual size and take one every morning before breakfast.

To commence with, many physicians recommend an emetic and then a cathartic.

Take barberry bark 1 pound, $\frac{1}{2}$ an ounce of cayenne pepper, and 1 ounce of cloves. Pulverize and mix well. Put $\frac{1}{2}$ a teaspoonful of this into a cup of hot water and sweeten to the taste. It will be pleasanter to put in a little milk. Drink a swallow or two before each meal. You can make it stronger or weaker as you think best.

Please use this tea instead of whiskey to keep you warm in a cold day. Another remedy is :

Take a teaspoonful of pulverized charcoal in hot water every third morning before breakfast.

Sweet-flag root is very highly recommended. Carry a little of it in the pocket and eat a small bit of it occasionally.

Wild cherries put into whiskey is very highly recommended.—I should prefer preparing it without whiskey. Make a strong decoction of the berries after they have been pressed, by pouring hot water on them and letting them stand about four hours.—Then sweeten and take a swallow three or four times a day.

Many kinds of biscuits and are recommended, but I will simply say that Graham bread is good enough.

If you have dyspepsia, use some of these simple

remedies, or take no medicine at all, and diet as I have recommended.

Heartburn.

This disease is a disorder of the stomach instead of a disease of the heart. It is caused most frequently by overloading the stomach. In all such cases eat less, and masticate your food well.

In severe cases of heartburn relief may be had by drinking a little alkaline water, or the acidity may be neutralized by any of the alkaline earths, but none of these will permanently cure the disease. For a permanent cure eat but little and eat only such food as you find by experience is less likely to bring on the disorder.

Sometimes when the patient has for a long time been in the habit of eating too much, he will find that abstinence from food does not bring immediate relief. I have heard the following remedy highly recommended :

Take equal parts of fresh ox-gall and assafoetida. Make into common sized pills and take one about an hour before each meal, and another about an hour after each meal. In a few days you will be free from heartburn.

Here is another remedy which I presume is equally as good, and certainly more agreeable :

Take an orange and squeeze out all the juice; put this juice into a large tumbler of water and sweeten; then stir in half a teaspoonful of bicarbonate of soda. Drink when effervescence ensues.

Colic.

Over indulgence in eating unripe fruit often brings on this distressing complaint. Gripping pains are felt in the bowels, chiefly about the navel. These pains are often accompanied by vomiting and purging.

When these symptoms are very strong, rub up one drop of croton oil with an ounce of rather thick mucilage and sweeten it with sugar. Take it and if necessary, repeat the dose in three or four hours.— When the symptoms are not very severe, let the patient drink pretty freely of spearmint or peppermint tea.

Some persons have colic occasionally without the symptoms of vomiting and purging. In such cases steep the root of blue vervain in water. Drink it freely as you would spearmint tea. It gives immediate relief. Drink a little of this tea, two or three times a day for six weeks and your “spells of colic” will not “come on” as frequently as before, and they may not come at all.

Dysentery.

This is an alarming disorder and needs careful attention. Bloody flux, as this disease is often called, may be communicated by infection, but it is oftener caused by bad diet or improper exposure. It begins with frequent griping pains in the intestines, and looseness of the bowels. There is usually considerable chilliness with hot flashes. The patient feels nausea, and often a little headache. Among the first symptoms is lassitude, quick pulse and great thirst. At first the discharges are mucous and slightly mixed with blood, while the patient feels a bearing

down as though the whole bowels were about to fall out. The passages are attended with acute pain and severe griping.

Dysentery is very much like typhoid fever with inflammation of the bowels added. The same treatment recommended in typhoid fever is recommended here, but there is a better way than to keep the patient full of medicine. I will give a treatment that I consider better than physic taking.

Perhaps you think the patient should eat all he can to keep the strength up, but this a very wrong idea. The greatest danger is in too much eating. If you would cure the disease without leaving any bad effect in the system, eat but little, or what is better, eat nothing at all for a few days, and when you commence eating again eat only a little at a time, and that not oftener than at regular meal times. Should it become necessary to take anything to keep up the strength while the disease is on you, you may take a little flax-seed tea, or slippery elm tea, or the broth of mutton, or something else of that nature, simple and light.

Take a warm sitz-bath every day, or oftener if thought best.—Remain in the water about 15 minutes. After coming out of the water dry the skin by wiping the whole surface with a towel. Then let some strong, healthy person rub the whole surface with his bare hands. Then cover the bowels with cotton, on which has been sprinkled a little camphor gum. The bowels and stomach should be kept warm by external applications. The feet and legs should be kept warm in the same way. If they are not warm enough, warm a piece of flannel and wrap around them. Renew the warm flannel often enough to keep the bowels, stomach and extremities warm. Remain as quiet as possible. Lie in bed most of the time, and do not let the mind become excited about anything. This treatment will usually cure the disease in three or four days.

When the disease becomes chronic, it takes a little longer to cure it. Eat sparingly of wholesome food. Make a tea of cloves and flax-seed, and drink a swallow occasionally. In chronic dysentery give an injection of tepid water after each passage, or perhaps it may be better to occasionally give an injection of slippery elm tea instead of water.

Take one tablespoonful each of Turkey rhubarb, willow charcoal, and saleratus. Put the whole in a half-pint bottle and fill nearly full of water. Then put in a few cloves and half a dozen drops of peppermint essence. Cork it and shake it well occasionally for twelve hours when it is ready for use. Take a teaspoonful of this liquid twice or thrice a day.

I think I have already pointed out the best course to be adopted, but I will give the following for the benefit of any one who does not think as I do.

Mix sixteen grains sugar of lead with four grains of opium.—Make it into a mass with syrup enough to make eight pills. Take one pill each day.

I take the following recipe from a newspaper. I do not consider it as dangerous as some remedies often recommended. The paper I take it from calls it infallible.

Take one tablespoonful of common fine salt and mix with twice the amount of vinegar. Then pour upon it half a pint of warm water, and let it stand until cool. It should always be taken when cool. A wine glass full of this mixture taken every hour will be found quite efficacious in curing dysentery. Should it nauseate the stomach, do not take it quite so often. for a child, take the same proportions, but do not give quite so much of it at a time.

Jaundice.

When the blood becomes loaded with bile, it tinges the skin and white of the eye with a yellow hue, more or less deep, in proportion to the obstruction which prevents the bile passing off.

Among the causes which bring on jaundice, may be reckoned violent passions, catching cold, taking too many purgatives.

Decidedly the best treatment for this disease is to live on proper food and bathe frequently. After each bath apply friction to the whole surface. This is quite important.

Shave off half a wine-glass full of castile soap, and fill up with water or milk if you choose—stir it a little and drink immediately. This should be taken in the morning just before breakfast.

The following is highly recommended by those who have used it:

Take one tablespoonful each of allspice, brimstone and tumeric. Pulverize them all together, and then thoroughly mix them with half a pint of molasses. Take one tablespoonful every other morning, and on the mornings when you omit the medicine, take a bath. Continue this for two weeks if necessary.

Make a strong tea of dandelion and occasionally take a swallow.

Liver Complaint.

Many of the diseases that flesh is heir to go under the name of Liver Complaint, but at present I wish to notice actual disorders of the liver. Among the causes of liver disease may be enumerated the exhausting influences of heat and the sudden check of free perspiration, eating too much highly seasoned food, and taking too little exercise, also drinking ardent spirits. Great anxiety or excessive mental labor may bring on liver complaint.

In acute inflammation of the liver, there is a sense of pain and uneasiness in the right side. This pain is much increased by pressure or by any sudden jerk, or even a slight blow on the side. Not unfrequently there will be pain in the right shoulder especially at the top. This pain is often felt quite severely between the shoulders. The complexion often becomes sallow and the appetite depraved. Often there will be a great depression of spirits. The bowels become irregular, and the stools more than commonly offensive. There is sometimes great debility and considerable emaciation, which in some cases make the patient and his friends think he is "almost gone with consumption." When there is great emaciation and debility, there is usually considerable cough and expectoration, with difficulty of lying on the left side.

The urine is of a deep yellow color, and in many cases the patient has considerable fever. Often there will be a difficulty of breathing, and sometimes the cough will be dry, instead of being attended with expectoration. The patient is more than usually thirsty. Sometimes nauseating and vomiting ensue.

Formerly it was supposed that in liver complaint nothing but mercury would do much good, but happily that false idea has not at present much hold on the minds of the intelligent. My advice is, never use mercury in any of its forms.

Drink pretty freely of dandelion tea and sarsaparilla tea.—Cheerfulness, though often a difficult medicine to get hold of, is the first and best to use in curing this disease. While this disease is upon you, you may eat rather plentifully of nutritious food which has been selected from the vegetable kingdom, though the supper should be rather light. For supper eat nothing sweet or very sour. Eat no butter nor anything else for supper that is much salted. If the patient does not have a regular daily passage of the bowels, a mild cathartic may be given once a week, but not oftener than that.

When the liver is simply torpid and inactive, the eyes seem to swell in their sockets, and there is severe pain in the front and lower portion of the brain.

In such a case the best remedy is to give the patient a thorough washing all over, and wipe perfectly dry. Then let a healthy person *rub* and *pound* the parts most affected with the open hand. These baths with rubbing and pounding should be given when the patient is feeling best and most free from pain.

When there is severe and constant pain in the side, make a strong decoction of smart-weed and wormwood. Then at night before going to bed, bathe the side with this decoction and rub it in well before a hot fire, or what will be more convenient, heat an iron and hold it near the side while rubbing.

A good remedy to keep the bowels free, is made of equal parts by weight of dried mandrake root, dandelion root, spearmint leaves, and blood root. Make a strong decoction of the above with warm water, and take enough of it occasionally to act as a laxative. Vomiting at any time may be checked in the usual way

Worms.

Nobody has yet been able to decide the question, how worms are produced and propagated in the bowels, but it is quite evident they are often there. It is pretty generally believed that worms do not affect adults as frequently as they do children. This, however is a great error. Experience proves that as many grown people as children are affected with worms. Persons of sedentary habits are most likely to be thus affected. Those who are troubled with dyspepsia are quite apt to be troubled with worms.

The presence of worms will bring so many different symptoms that it is often difficult to decide whether it is worms, or some other disease. There are no infallible signs to indicate the presence of worms except to actually see them. I will give a description of some of the symptoms which are most likely to prove their presence :

If the belly is hard with an itching of the fundament, it is one of the most certain signs. The breath smells very disagreeable in the morning and sometimes all day. The nose itches, the appetite is voracious, and the patient frequently desires to go to stool. The symptoms are so numerous and so well known that I will not dwell on them.

The remedies recommended for worms are even more numerous than the symptoms. Costiveness must be removed before a person affected with worms can be cured.

Children, or other persons affected with worms, should not be allowed to eat candy or any kind of

sweet food. Cakes, preserves, pies, puddings, &c., should be avoided.

Take 1 ounce of good quick lime, put it into a dish large enough for the purpose, and pour in 1 quart of rain water. Cover it up and let it stand till the lime is well slacked. Stir it well and let it settle. Then pour off the clear water, put it into a bottle and add a very little of the oil of cloves or a few cloves. Keep the bottle corked. For a child take about a wine-glass full of this in beef tea or some other soup. A grown person can take more.—No harm will be done if you take an over dose. Take a dose a few minutes before each meal. Continue this for a month or two, and the worms will not only disappear, but the general health will be greatly improved.

If the itching of the fundament is very severe, mix a little of the lime and clove water with beef tea and inject a little of it in the usual way. This will kill every worm it touches.

Mix a little finely powdered cloves with whatever you eat for supper, and drink a swallow of weak clove tea just before going to bed. About twice a week give an injection of a teaspoonful of linseed oil in a sufficient quantity of warm water.

I am told that an injection of a weak decoction of cabbage leaves is excellent.

Use more than the usual quantity of salt with your food when troubled with worms.

In very obstinate cases a little spirits of turpentine may be given, but I would not advise you to give much.

Tansy and other bitter herbs are very highly recommended, but they are useful only because they strengthen the bowels.

Tape Worm.

The presence of this worm in the bowels is very annoying and distressing. The same treatment recommended for common worms is safe to use in cases of tape worm, but sometimes the tape worm will not leave on a gentle invitation to be gone.

Rectified oil of turpentine is a very powerful remedy and often used with great success. For an adult, take 1 ounce of the oil in a glass of peppermint water sweetened with honey. Repeat the dose every six hours till the worm is expelled. Four or five doses will usually be enough. After the worm is expelled take a dose of castor oil.

I have given the above recipe as it was given to me, but I think a dose every six hours is too often. I would say once in twelve hours. For children the

dose should not be so large, and should be given in new milk sweetened with honey.

When the worm begins to pass from the bowels, be very careful and not break it off, but let it all come away, for if any part of it is left in the bowels it will live and grow till it is as troublesome as before any part of it passed away.

If you have reason to think that a tape worm is making his home in your bowels, drink freely of slippery elm tea, and carry some of the bark with you to chew and swallow. I have heard of cases where this remedy alone has been sufficient to expel the tape worm.

A strong tea made of male fern is also useful.

A decoction of pomegranate bark is said to be a very powerful remedy.

When my father was quite young he was troubled with a tape worm and had taken many kinds of medicine without success. He had spells of being very hungry. One day in the spring of the year, one of these hungry spells came on when he was where he could not get anything to eat. He saw some small trees (pine trees I think) and went to them and peeled off the bark. He then scraped off the juice from the tree and inside bark and ate it.— He kept eating till he did not feel like eating any more. The result was that it killed the tape worm which soon passed away.

Diabetes.

In this disease there is an immoderate discharge of urine. There is more urine discharged than all the liquid food the patient takes. The discharge is of an agreeable smell, and those who are fond of fasting say it has a sweetish taste. The patient has a continual thirst, with some degree of fever. The

strength soon begins to fail, the appetite is very poor and the flesh wastes away.

This disease should be promptly attended to, because if not cured soon, it is very difficult to cure it at all. It is almost impossible to cure it when it gets hold of one who is in the daily habit of using intoxicating beverages.

Eat but little; and that only what is easily digested. Take a bath every day, and rub the hips, back and stomach with the hand. By no means omit the friction.

Drink sarsaparilla tea every morning at breakfast. It would be a good plan to take a sitz-bath every day about half way between breakfast and dinner. If you have no more convenient arrangement, fill a common wash tub full enough so that when you sit down in it, the water will cover your hips. Let the water be cold. Do not warm it at all, not even enough to take the chill off. Sit down in the water and remain there from ten minutes to half an hour as you feel able to bear it.

Always wet your head with cold water before taking any kind of a water bath.

In diabetes avoid all stimulating food and drinks.

Hooping Cough.

This is a disorder to have once and only once ;—very few pass through life without having it. It generally comes in childhood, and commences like a common cold accompanied with a general soreness of the flesh. This soreness usually continues three or four days, and while it continues the patient has a very slight cough, or rather a short hacking, husky effort hardly strong enough to be called a cough. When this soreness begins to diminish, a convulsive cough a little like hiccough comes on. The hoop or whooping commences between the fourteenth and twenty-first days. The fits of whooping recur from two to

six times in twenty-four hours. These whooping spells are usually most severe in the night after sleeping. In fatal cases of hooping cough, death usually takes place between midnight and daylight. Any sudden surprise or excitement may bring on the whooping at any time.

The violent stage of this disorder may continue a few weeks or a few months. The third stage or decline may continue from one month to one year, and in some cases even longer. Robust, healthy children will not suffer as much as those who are weakly. Very young children are more likely to die with hooping cough, than those who are older.

If there is much feverish heat and difficulty of breathing, with but little discharge of phlegm after the fit, it must be regarded as a bad sign. If the hands and feet are warm and the skin moist, it is a good sign. If the bowels are open and the urine comes easily and in abundance it is favorable. Vomiting, expectoration and a little bleeding from the nose after a fit of coughing, rather indicates that the patient is not in a dangerous condition. If vomiting takes place during a fit of coughing it will cleanse the stomach and greatly relieve the cough. Should the fit of coughing be very severe and no vomiting, it would be well to give a little ipecac, just enough to cause the patient to vomit a little.

Soak the feet in warm water every night. If the bowels are not sufficiently open give castor oil.

Make a strong decoction of the dried root of black cohosh and give the patient a little as occasion requires.

Stewed onions eaten pretty freely for supper is said to be very good not only for whooping cough but also for a common cough.

A syrup said to be excellent in relieving cough is made as follows :

Stew $\frac{1}{2}$ a pint of sliced onions and 1 gill of sweet oil in a covered dish. Then strain and add a gill of good honey. Stir it well and cork it up in a bottle. Take a teaspoonful at night before going to bed. Take a teaspoonful any time when the cough is troublesome. A teaspoonful is a dose for a child three years old.

Many of the popular patent medicines so highly recommended to cure cough will not do half as much good as this simple syrup. Any time when you are troubled with a common cough take a dose and it will relieve you.

Great care is required in giving strong medicines to infants. In treating very young children select mild remedies.

An embrocation may be made as follows :

Mix together equal parts of olive oil and oil of amber. Then add one-eighth part as much oil of cloves as you have of the other mixture. Rub some of this on the chest two or three times a day. The rubbing is of great service. Even where no embrocation is used it will do much good to rub the breast and the whole surface with the hands.

If convulsions occur give a little ether.

The following is simple and considered safe :

Dissolve a scruple of salt of tartar in a gill of water. Then add 10 grains of cochineal and sweeten with sugar or honey. Give an infant a few drops occasionally, say 2 or 3 times a day.

The diet should be light.

Diphtheria.

Whatever is good to use in case of common sore throat, will do some good in diphtheria.

The tincture of black snake root diluted with about ten times its amount of water is an excellent remedy to be used as a gargle. Gargle the throat every hour till the disease is stopped. Then use once or twice a day for a week or two. Take internally a few drops while using the gargle.

The treatment further than as above should be about the same as in other cases of sore throat.

Croup.

This is an inflammation of the windpipe, and many suppose it affects only children. But under the name of "malignant sore throat," adults often have it. When a child has it the breathing is longer than usual, and is accompanied with a wheezing sound.

Croup is a dangerous disease and therefore requires prompt attention.

Wash the whole body and soak the feet if necessary in warm water for half an hour at a time. Also bathe the hands and arms with warm water. Frequently apply cold compresses to the throat.

Many physicians recommend an emetic, to be followed with a cathartic.

To guard against croup, diptheria and other forms of sore throat, keep the feet, legs, hands and arms warm. Wash the feet often and wear boots or shoes that will keep them dry. Wet and dirty feet have caused many a pain in the throat.

Influenza.

This disease begins very much like a common cold only more severe. The nose is stopped up so the patient must open his mouth to breathe. There is a dull, heavy pain in the forehead and sides of the

head. The eyes feel heavy and the motion of the lids seems stiff. In a short time there is a thin watery discharge from the nose, and sometimes from the eyes, making the patient look as though he was crying. Sneezing seems to be in order, with considerable hoarseness, and a sense of roughness in the throat. There is some cough with a disagreeable feeling in the chest, and a difficulty of breathing.— In short, the patient feels as though he had caught a severe cold, only he feels weaker and the symptoms are stronger than in a common cold. This disease is almost always epidemic, affecting old and young, male and female. In some cases it is fatal, but not often. It affects the young more than older persons.

Treat this disease the same as a common cold. Bathe the whole body and soak the feet in hot water. Drink warm drinks so as to promote perspiration. Sleep all you can and eat but little till you are well again. If you go out, put on clothing enough to keep yourself rather warmer than usual. If the weather is cool or damp keep near the fire.

Erysipelas.

This disease was formerly called “St. Anthony’s Fire,” and some persons know it only by that name now. It is sometimes epidemic in prisons and hospitals, but it is seldom, if ever, epidemic excepting in crowded places. Dyspepsia is one of the greatest though not the only cause of Erysipelas. If the digestive organs do their work faithfully, “St. Anthony’s Fire” will not be likely to burn much.— Probably in more than half the cases of this disease

indigestion or improper digestion is the cause. This being the case, you will see the necessity of living on food easily digested.

The disease begins with a coldness often amounting to a shivering coldness. These cold spells are followed by drowsiness and great confusion. Sometimes this confusion amounts to actual delirium.

In this disease there is redness and inflammation of the skin, which begins to show itself the second or third day of the fever. This is accompanied with considerable swelling and oppressive fulness. The point of attack may be on any point of the body, but the redness and inflammation more generally appears on the face or back of the neck and gradually spreads over the scalp of the head. When it attacks the face, the eyelids often become so much swollen as to entirely close the eyes. Then blisters appear containing a yellowish watery fluid.

When the head and face are much swollen, some means must be taken to promote an equal circulation of the blood. Perspiration is quite important. Give the patient a foot and vapor bath, so as to produce a thorough sweat every day until the balance of the system is restored and the inflammation all drawn out of the head and face. Diaphoretic teas should be pretty freely taken. The patient should go to bed immediately after the bath, cover up warm and remain there at least half an hour.

If the disease becomes obstinate and chronic, it will require persevering efforts to remove it. Whatever part of the body it may attack do not neglect the daily bath. Use some appropriate ointment or apply slippery elm to the inflamed part. The disease is not dangerous unless it attacks the head and face violently, in which case in addition to the above you should dip the ends of your fingers in cold water and gently rub the inflamed part, taking care to rub downward excepting around the eyes. When the eyelids are badly swelled, gently rub them with the ends of the fingers, making the passes from the nose outward.

Bronchitis.

A general weakness of the system will often bring on this disease. Over-eating often brings on bronchitis. In this disease there is often a troublesome cough which is sometimes dry, but oftener attended with a copious expectoration. If you catch a severe cold, and conclude to let it run till it gets well, without any remedy, it may run you into the bronchitis. Consumption sometimes commences in this way.

I know of no medicine that will cure you, unless you call in nature to assist. For this purpose read aloud for a few minutes at a time every day, or what is still better, if you can get away into the woods where there is no danger of causing your neighbors to think you are insane, vociferate with earnestness for a few minutes. Try to sing in a loud whisper. These efforts will usually do more good than many doses of medicine.

Put one dram of nitric acid in two ounces of pure water. Shake it well, and take one drop on a little sugar just before breakfast, and repeat the dose just before going to bed at night. Remember one small drop is enough.

Use no strong drink of any kind. Eat no new bread nor anything else liable to ferment on the stomach. Mutton, veal, fowl, eggs, and the meat of wild game, such as squirrels may be freely eaten for breakfast and dinner, but the supper should be light.

Take a vapor bath once or twice a week. Then rub the whole surface with the hands, after which take equal parts of sweet oil and spearmint essence. Mix, and rub a little over the breast and throat. Rub it in well.

In cold or changeable weather it is best to wear woolen as that is the best guard against sudden changes of temperature of the body.

If you can get a pair of hair mittens, have some one put them on and give you a good rubbing all over, after coming out of a vapor bath.

Have your meals at regular hours. If you have three meals a day on week days, you should have three meals on Sunday, and at the same hour in the day. Eat enough to satisfy hunger, but not too much for supper. A neglect or failure to eat dinner for the sake of Sunday politeness may cause you many hours of suffering.

Mix together equal parts of olive oil, spearmint oil and tincture of arnica. With the ends of your fingers apply this to the throat and over the lungs, and rub it in well once a week. This should be done in a warm room, just before going to bed.

If the cough becomes very troublesome, you may take a small dose of laudanum.

The bowels must be kept open, or all the medicine will do but little good.

Asthma.

The symptoms of asthma are so well known that I need not take up space in describing them.

Persons who are subject to the asthma, usually know when a fit is coming on. The warnings of an approaching fit should receive prompt attention.

Soak the feet in warm water, and endeavor to get up a perspiration, by drinking warm herb tea. By immediate attention a fit may frequently be avoided. As soon as you get your feet out of the bath, wipe them dry and put on good warm woolen stockings or socks, and commence walking about the room. Breathe slowly and take long breaths. The great probability is that if this does not keep off the fit entirely, it will at least make it less severe.

If the fit has already commenced, pursue the same treatment, and if there is much pain in the breast apply hot flannels over the seat of the pain. This is not a disease that can be cured in a day, it will take weeks and months. It is of the utmost importance that the whole surface be kept clean. Wash the whole surface at least once a day in clean soft water.

If the fit is attended with a sense of great suffocation, give a teaspoonful of the tincture of lobelia in a cup of warm water, and repeat the dose every hour till the symptoms are more favorable.

I am giving quite a number of remedies so that you may select whichever will suit you best, or be most likely to be beneficial in your case.

Make a strong decoction of equal parts of angelica, elecampane, and spikenard roots, and hoarhound tops. Sweeten with honey and add about one-fourth as much tincture of lobelia as there is of the mixture. Take a teaspoonful of this every few minutes till relieved, and then take a teaspoonful several times a day for a month or longer if thought best.

Another simple remedy is, mix 1 ounce of castor oil with 4 ounces of honey. Take a teaspoonful in the morning before breakfast, and at night before going to bed.

Dissolve a little saltpeter in water, then take a piece of brown paper and wet it in this solution. Let the paper thoroughly dry and then wet it with a little origanum oil. Then cut the paper into long strips convenient for use. At any time when you feel as though a fit of the asthma is coming on, burn a few of these strips of paper, and hold them so that while burning you can inhale the smoke. The best way to do this is to sit down in a chair, and then leaning forward light one end of the strip of paper and

hold it under your nose in such a position that the smoke as it rises can be inhaled. Breathe long breaths during this time. Even after the fit has come on, great relief will be obtained by this inhalation.

James Pury of Alden, Erie county, N. Y., gave me the above recipe. Alden is my native town.— I was well acquainted with Mr. Pury, as he lived for a long time within a few rods of my father's residence. Mr. Pury had long been severely troubled with asthma, and had tried many remedies without success. When he tried this it gave him more relief than anything else he had ever tried. The saltpetre without the origanum oil did but very little good. Mr. Pury recommended this to all his friends and acquaintances who were suffering with asthma, and all who tried it pronounced it good.

More than ten years ago I met a man in Erie, Pennsylvania, who said he was cured of asthma by using for tea common chestnut leaves steeped in water and well sweetened. Gather the fallen dry chestnut leaves in autumn. Make a tea from them and drink it every morning for breakfast.

No medicine will effect a permanent cure if you neglect daily bathing and friction.

Small Pox.

This dreadful disease commences with the usual symptoms of fever, only the drowsiness and languor are much greater than in common fever. This disorder is usually caused by the communication of in-

fectious matter. The small pox begins to appear like flea bites about the third or fourth day. These flea bites are usually first seen on the face, but sometimes appear first on the arms or breast. If the progress of the eruption is slow, and the fever abates as soon as the pustules appear, it may be regarded as a favorable symptom.

If the pustules are distinct with a red base, and filled with a thick whitish matter which afterwards becomes yellow, the disease is not dangerous, though even then great care is necessary. But if the color of the pustules is a livid brown, it is an unfavorable symptom. If the pustules are small and rather flat, with black specks in the middle, the symptom is by no means favorable. The confluent forms of small pox is the most dangerous. In this form of the disorder the pustules run into each other.

This disease should be considered and treated as a fever. In the early stages of the disease the patient will be hot, and should be freely exposed to the cool air. The whole body should be washed with cool or even with cold water. A cold bath will moderate the symptoms and greatly lessen the danger. Frequent bathing in cold water at first will greatly diminish the number of pustules. It is quite important that this cold bathing should not be neglected.

The room in which a small pox patient is confined should be well ventilated and kept cool enough so that he will experience no disagreeable degree of heat. Those having the care of the patient should consult him often and see to it that the room is not allowed to get too warm for him. The patient should lie on a mattress and be covered with only a few clothes. He should have a room by himself, and his attendant should see to it that all the clothing about him is changed at least as often as once a day.

Make a tea of equal parts of catnip and saffron, have it warm and let the patient drink freely of it during the day, but never wake him in order to give him tea or medicine. Sleep is of the utmost importance. At night give him something to make him sleep.

Great care should be taken not to break the pustules. If the pustules are broken the scars will be deeper, and consequently the greater will be the disfiguration. The patient should not be violently purged.

Some eminent physicians recommend that the chest be thoroughly rubbed with croton oil as soon as the eruption begins to appear. The object of this is to cause the whole of the eruption to appear on the body so as to remove all danger of disfiguring the face with disagreeable scars. It is also claimed that by rubbing the oil on the surface of the body, it prevents the disease from attacking the internal organs. The application of the croton oil may be made to any part of the body, but it is preferable to apply it to the breast as that is not as likely to be disagreeable on account of the position in the bed.

Some physicians say keep the room dark and lance the pustules with a needle, but I should hardly call that the best way.

Itch.

This disorder is much more disagreeable than dangerous. It is caused by infection or contact and usually makes its first appearance between the fingers and on the wrists, in the form of small, watery pimples. The itching is intolerable, and those who have it bear it only because they must or because they do not know how to get rid of it. When these little watery blisters are broken, sores and scabs take their places, often spreading to all parts of the body.

In real itch a small animal infests the skin, but "doctors disagree" as to whether this animal is the result of the disease, or whether the disease is caused by the animal. The discovery that the itch was a living creature was made with the aid of the microscope in 1812 by M. Gales in the St. Louis Hospital, Paris. It is said that this animal will live about four hours in clear water. After many experi-

ments it is believed that sulphur is a safe and sure remedy. When sulphur is used to cure the itch, the patient should be very careful and not take cold, and should wear more clothing than usual.

An ointment may be made of equal parts of sulphur and lard or fresh butter. Put in some lemon essence to take away the disagreeable smell. It will not be necessary in many cases to annoint the whole surface, but when it is, it should be done only in parts at a time, as it is dangerous to stop too many of the pores at the same time.

An itch ointment is made as follows :

Melt 1 ounce of Burgundy pitch and stir it well into 1 pound of fresh butter. Then remove from the fire and immediately put in 2 ounces of spirits of turpentine. When it begins to cool a little put in 1 ounce of red precipitate, and stir until cold.

This is not only a sure cure for the itch, but is excellent to cure pimples on any part of the body.

If you keep clean you will not be likely to be much troubled with the itch. I think if I should be so unlucky as to get this disorder, I should first try to cure it by washing the whole body every day with strong soap suds and immediately after wash with pure soft water. I have not much doubt about the power of this practice to cure.

I would recommend any who have the itch or any eruption to discontinue the use of pork entirely, and not eat butter more than once a day and that in the morning.

Nervous Rheumatism.

This disorder is commonly known as "the fidgets." Some doctors tell us the fidgets are caused by too much rest, but that is hardly a correct explana-

tion of the matter. It requires a gentle effort to hold the arm stretched out at full length from the body. Such steady and continued effort causes the fidgets. If you doubt it, just stretch the arm out from the body and keep it in that position for a quarter of an hour without stirring, and you will be very apt to have a fit of the fidgets. These fits are often very distressing.

To cure a fit of the fidgets, lie down on your back, keep the limbs immovable and rest quietly for half an hour unless you are cured sooner. To guard against nervous rheumatism, take proper exercise, keep clean, and do not remain for any length of time in one position, or do any business that requires such continual effort as mentioned above.

Scrofula.

This disease is sometimes called "King's Evil." I do not know the origin of the name "King's Evil," but presume it arose from the absurd notion once believed by many, that if a king touched a person who was afflicted with scrofula, he would immediately be well.

Hereditary taint is the usual cause of scrofula, but it is sometimes brought on by any cause that impairs the general health. It sometimes follows a severe case of small pox, measles, or scarlet fever.—A child fed on weak, watery, half cooked vegetable food and stuffed with fat pork, will be almost sure to have scrofula sooner or later. Exposure to damp cold weather with insufficient clothing, is also a cause of scrofula. In short, scrofula, when not heredita-

ry, is almost always produced by improper habits or a disordered state of the general health.

When scrofula makes its appearance in the form of tumors and swellings, the patient should not eat very freely of vegetable food, but he may eat freely of good bread or biscuits. He may eat freely of baked potatoes, if he relishes them, once a day. He should not eat any fat meat of any kind, but may eat rather freely of lean boiled beef or mutton.

External applications may be applied. Ulcers and swellings should be frequently washed with alkaline water. If the sores are open the water should be injected into them. After the sores are washed and well dried, put on a plaster of the black salve, a recipe for which you will find in another part of this book. Do not think that this or any other treatment will cure the patient in a day. It may take months to do it, but do not be discouraged, if you keep on, complete success will be the result, but there is still more to be done.

I have been told that the common sponge burned to ashes and mixed with mutton tallow and applied two or three times a day is excellent. I have never tried it however, but the black salve I know to be good.

Equal parts of Baberry bark and slippery elm well pulverized and made into a poultice is sometimes used with good success.— A little salt should be added.

Pure air and plenty of light are quite essential. The patient should not neglect to bathe the whole body once a day. Once a week he should bathe in salt water. The rest of the time use pure soft water.

Scurvy.

Land scurvy and sea scurvy are very much alike, and what is good for one is good for the other. A long continued use of salted meat without fresh vegetables causes scurvy, and despondency increases it. A patient having the scurvy will improve much faster if he can have cheerful company.

Neglect of cleanliness is a prolific cause of scurvy. Living in cold, damp situations, and in dull, gloomy places with disagreeable companions helps to bring on this disease, and consequently the opposite of these will help to cure it.

Pale, bloated complexion with spongy gums and offensive breath comes with the scurvy, the legs swell also and there are foul ulcers. Livid spots may be seen on the skin, while the urine is fetid and the stools extremely offensive. In the last stages of this disease the joints become stiff, and there is considerable bleeding from different parts of the body. If violent purging or dysentery ensues, the disease will be most likely to prove fatal.

A cure cannot be effected unless the causes are avoided. As soon as you find the scurvy coming on, make haste to avoid the causes that bring it on. Do not exercise enough to get very tired, and be sure and not get into any strong current of air.

In scurvy it is of the utmost importance to attend to the diet. Throw aside all salted meat and eat fresh bread and plenty of vegetables. Pickles, sour-kraut and such things may be pretty freely used. Eat freely of ripe fruit, berries, lemons and oranges. The bowels must be kept open. If the patient suffers from acute pain, let him take a Dover's powder.

Cancer.

This dreadful disorder usually begins with a small hard tumor, but the cause is yet unknown. A great many theories and opinions have been advanced but the real cause still remains a mystery. Very few persons under the age of forty have cancer. Cancer most commonly appears in the lips, arm pits or female breast, but may, and sometimes does come in other places. It not unfrequently comes in the liver or womb. Sometimes a cancer will come from the injury of a wart, moles, or any other injury. The attempt to remove a birth mark may result in a cancer.

Cancers are often made worse by improper treatment. When they first begin to come they are often irritated by pressure which causes them to extend and send out roots or limbs. These roots or limbs are supposed to resemble the claws of a crab and hence the name, cancer. At first the color of the skin is red, but it changes to purple and then becomes a bluish color after which it turns black. There will be considerable heat and burning with gnawing and shooting pains. By this a cancer may be known from other humors. After awhile the skin begins to break away, and a thin acrid fluid comes out which destroys the neighboring parts which soon causes an ulcer very disagreeable to look at. The pain becomes even more intense than before, while the stench is intolerable. A hectic fever exhausts the strength, and the appetite fails.

Those who dress the cancer should use the utmost care and not get any of the discharge onto themselves or on to the flesh of the patient. I would not advise the use of the knife at all. Surgical operations are seldom if ever as good as some milder treatment. When a cancer first begins to make its appearance means should be taken to retard its progress. If you commence in season the chances are in your favor. Prompt and proper treatment may keep it in check so far that it will never cause any very serious injury.

As soon as you find a cancer is coming attend to your general health. do not bundle or press on the tumor and if you touch it at all touch it very carefully. Be particularly careful to guard it so that it will never receive any kind of a blow or wound. You should live on simple and pure but nourishing food. Let your work be light and pleasant. Never indulge in any excess of any kind. Avoid excitement and passion. Bathe the whole body frequently and rub well, but when you wipe around the cancer do so very carefully, and be particularly careful to do nothing to call the blood to that part of the body. It will not do to be irregular in any of your habits. Eat, and sleep at regular hours. In short do nothing that can injure your health. If you have any kind of a disease about you take the proper means to restore health.

Sometimes a very simple and apparently absurd practice will do good when the more popular and perfectly scientific methods have failed. John C. Rogers of Alden Erie Co. N. Y. once told me that many cancers in their early stages had been removed by the following simple if not absurd practice:—

Every morning when you first awake, and before you spit put your finger in your mouth and there wet it with the spittle or saliva. Then touch this to the cancer. Do this a few times till the cancer is quite wet with the saliva and let it dry on.

Now I presume you may feel somewhat inclined to laugh at the above but I have some faith that it may sometimes do good. If you have a sty^e coming on the eye the above will stop it if applied the first morning after it is felt, and I see no reason why it may not be powerful enough to do some good on a cancer.

Equal parts of chloride of Zinc and gold mixed with enough flour to form a paste is said to be very useful. Put this paste on and let it remain a few hours and then wash it off.

After the cancer commences discharging poultices may be applied to remove the disagreeable odor. Scraped carrot roots are excellent for this. Yellow dock root has sometimes been used with advantage, also a poultice made of slippery elm bark.

A paste made of chloride of Zinc and extract of blood root is good in the earlier stages and is often used after the cancer commences discharging. Most of the vegetable plasters in use for cancer are composed in part of some mineral substance.

A strong tea made of yellow dock root drank every morning will be of some service if the sore is washed several times a day with the same kind of tea.

Make a strong lye of hickory ashes and boil it down till it is about the consistency of strained honey. Apply this to the cancer and let it remain half an hour if it can be borne, if not wash it off

sooner. As soon as it is washed off apply a plaster of the black salve or some suitable ointment. This need not be applied oftener than once in two days, but the other treatment must not be neglected.

Olive oil boiled down about one half and rubbed on to a cancer is said to be of great use.

Boil some figs in new milk until they are tender. Mash them well and apply hot as a poultice, but a poultice of this kind should not remain on more than half an hour at a time and one application each day will be sufficient. The first application will most likely cause considerable pain but after that it will be more likely to relieve the pain. After each application the sore should be well washed and properly treated otherwise.

Dropsy.

Irregular living and hard drinking have brought on many cases of this disease but these are by no means the only causes. It often follows fever or any other severe fits of sickness. Usually it begins with swelling of the feet and ankles along towards night and if the finger is pressed onto the swelled part it will leave a little pit. The swelling which at first was only noticed in the feet and ankles gradually ascends and when it reaches the stomach the breathing becomes quite difficult. The patient wants to drink a great deal while the discharge of urine is small.

At length a slow wasting fever sets in accompanied with a troublesome cough. When this occurs in an aged person it is quite apt to prove fatal, but in a young person it may not carry him off if proper treatment is immediately resorted to.

Before the swelling has ascended to the stomach the legs should be well rubbed downward with the hands or a flesh brush—the hands are by far the best. Diuretic medicines should be given and the bowels kept open. When the swelling is in the stomach

an expert surgeon may draw off the water if thought best but this should not be done unless other means fail.

Drink freely of mint tea every few hours. Any of the common diuretic medicines will be of service and therefore some of them should be taken. Consult the best physician you can find as soon as you are aware you have the dropsy.

Ventilate Your Children's Rooms.

Most parents, before retiring, make it a duty to visit the sleeping rooms of their children. They do so in order to be satisfied that the lights are extinguished, and that no danger is threatening their little ones. But if they leave the room with closed windows and doors, they shut in as great an enemy as fire, although his ravages may not be so readily detected. Poison is there, slow but deadly. Morning after morning do many little children wake weary, fretful and oppressed. "What can it mean? what can it be?" the mother cries. In despair she has recourse to medicine. The constitution becomes enfeebled, and the child grows worse. The cause, perhaps, is never traced to over-crowded sleeping rooms, without proper air; but it is nevertheless the right one. An intelligent mother, having acquainted herself with the principles of ventilation, will not retire to her own room for the night without having provided a sufficiency of air for her children, in the same manner that she provides and regulates their night covering, or any other requisite for refreshing slumber.

Sometimes, by judiciously lowering a window, and at other times by leaving a door wide open, this end may be attained. In many houses the day and night nurseries communicate. When this is the case, the window of the further room should be left open, and the door between the rooms likewise open. Even in severe weather, young children can bear this arrangement, if they are not exposed to a direct draught.

Since I commenced writing this book I have seen the above article in several newspapers, but for the benefit of those who have not seen it and to preserve it, I have thought best to give it a place here. Too many sleeping rooms are poorly ventilated. It is also important that older people breathe pure air.

I may as well remark here while I am speaking of children, that whenever it becomes necessary to awake a child from sleep, it should be done as gently as possible. It is sometimes very injurious and never judicious to awaken a child or even an older

person with a loud noise or in an impetuous manner. Never carry a child suddenly from a dark room into one where there is a glaring light.

If your child is restless and weary at night, try to find the cause, and if you find that it is because you crammed him with "goodies" for supper, or let him eat too heartily of anything, do not do it again. If it is because you have put him into too warm a bed, remove some of the clothes. If it is because you have pinned the clothes around him too tight, loosen them. Bathe him before putting him to bed. Never let him eat much in the evening.

Children should not be required to learn anything as a task before they are seven years of age. But before that age they may be taught a great many useful lessons, without being forced to learn.

Drowning.

We are all liable to be called on at some time in life to aid in resuscitating a person who has been under the water till he is apparently dead. I have been called on more than once to assist in restoring persons nearly drowned. I shall not pretend to give the only method to be resorted to, and I am not sure that I shall give the best, but I will give the best I know of. All will agree that in a case like this prompt action is necessary, therefore I hope you will read this article now and remember it in order to be ready in case of necessity.

Handle the body as gently as possible, but lose no time. Send immediately for medical assistance, but be active while the messenger is gone. When a person has remained under water for fifteen minutes or more, he is suffocated for want of air. This stops the blood in the veins, and causes the face to appear swelled and of a livid purple color. Persons have sometimes been resuscitated after having remained under water for an hour or more, but this is very seldom the case. Indeed it is seldom a person is resuscitated after being submerged half an hour. Usually if they have not been under water more than fifteen or twenty minutes, they can be brought to.

If the body is somewhat warm and there is a little motion of the pupils of the eyes, it is favorable. As soon as the body can be taken from the water, it should be stripped and immediately rubbed dry. Rub it with hot flannels. Put warm blankets around it and place it in a warm bed, and if possible in a warm room.—If there is any froth around the nose or mouth, remove it.

It is pretty generally believed that death ensues from the rush of water into the windpipe, but such is not the case. Want of air is the cause of death. In drowning very little or no water is swallowed. The practice of hanging the body up by the heels to let the water run out is, therefore absurd. There is another very barbarous practice that I hope no one who reads this will ever resort to, because it never does any good and may do harm—I mean the practice of rolling the body on a barrel. Such an expedient is almost enough to kill a strong, healthy man who has not been suffocated.

Whatever is done must be done quickly. As soon as the alarm is given that some one is under the water let search be made, but while the search is going on, some other party should be putting things in readiness. Convey the body immediately to the nearest house, and after stripping and rubbing as mentioned above, apply warm bricks, bottles filled with hot water, bags of hot sand, pieces of hot flannel, &c., to the arm pits, soles of the feet and between the legs. If you can get a pair of dry, warm worsted socks put your hands into them and vigorously rub the body all over. As soon as a warm bath can be got in readiness put the body into it and rub it well for a few minutes. Then take it out and apply the remedies already mentioned. In carrying the body to the house or wherever you remove it to, and in short all the time, keep it very nearly in a horizontal position, though it is best to have the head raised a very little. Be careful however and not raise the head enough to cause the chin to press on the windpipe, and thus prevent any action therein.

It is of the utmost importance that the air of the room be as pure as possible, therefore if more persons are present than can work to advantage, let them remain out of doors or stay in another room. If any one proposes to rub the body with any kind of spirits; you should forbid it at once. The rapid evaporation of spirits counteracts the good effects of the friction, by carrying off, instead of retaining the heat.

As many persons as can work conveniently, should remain in the room and keep busy.—When those who commenced work at first get tired, they should be relieved by fresh hands. While the rubbing and other work is being done, efforts should be made to

restore the functions of the heart and lungs. To do this, force the air from a pair of bellows through one nostril, while the other nostril and the mouth are closed, but before doing this, draw up the tongue between the teeth in order that it may not press upon the opening of the windpipe, and cause the air to be forced into the stomach instead of into the lungs. Immediately before pumping the air into the lungs, press the ribs firmly down, and let them rise of themselves, or from the force of the air pumped into the lungs. After the air has been thus forced into the lungs, if the chest does not sink, gently press upon it, and thus cause an artificial rising and falling of the chest as in natural breathing. Continue this artificial breathing for some length of time, and imitate natural breathing as nearly as possible, but do not neglect the friction.

Stimulating vapors should be frequently applied to the nose.— It is also recommended that warm injections, in which there is a little salt and mustard be thrown into the bowels. When the patient gets so he can swallow, let him have a little hot, stimulating drink, but never force anything into his stomach or give him an injection with the syringe until there are some signs of life. Give the body a slight agitation every five or ten minutes. This will aid in clearing the mouth and throat of the frothy mucus that keeps coming up.

During all this work watch closely for the first signs of returning animation, which may be either sighing, gasping, slight pulsations of the heart, or slight convulsive twitching of the limbs. Part or all of these symptoms of returning life may be noticed, but do not relax your work when these symptoms appear. There is work to be done yet. Continue the efforts if necessary for four or five hours longer. You may think when these symptoms appear that all danger is past, but let me warn you that such a mistake as that has in many cases proved fatal. A great many have died for lack of treatment after these first symptoms of life began to appear. The treatment should not be stopped even for one minute; and here let me say that as soon as one worker gets tired, a fresh hand should take his place. Do not plead that the patient is your particular friend and therefore you will continue to work over him as long as there is any hope of life. When you are exhausted, do not work to the exclusion of a fresh hand, for by so doing, you rob your patient of vitality in the shape of animal magnetism that he would gain from some one that is fresh and ready to work.

To encourage these favorable symptoms keep at work and as soon as the patient can swallow, give him a teaspoonful of ginger tea, or some other warm stimulating drink. You will remember I said the patient should be placed in a warm bed. As soon as the other things mentioned are in readiness, he may be removed and placed on a matras where the attendants can work over him more readily, but when he is nearly or quite out of danger, he should be again placed in a warm bed where there is the greatest tranquility. If the patient is very young, or if a very weakly person, he should be placed in bed between two strong, healthy persons.

If signs of life do not appear sooner, the remedies recommended should be continued for at least twelve hours. I have heard of :

cases where the first signs of life were noticed after more than twelve hours work over the patient. Let me urge you not to give up all hope in less than twelve hours. No one person should work over the patient for more than an hour at a time unless in cases of necessity where a fresh hand cannot be had to take hold of the work. When a person gives up his place to a fresh hand, he should leave the room, and not return unless his services are required again, and he should not be required to work over the patient again, until he is well rested.

Hanging or Strangulations.

Should you ever chance to find a person who has hung himself, you will proceed at once to loosen the cord or whatever suspends the person. Then if the neck is not broken proceed the same as with a drowned person, only there will be no occasion for heating the body, though the rubbing is proper and should not be omitted. If you can get some leeches apply two or three to each temple.

Persons may be strangled or hung without any intention of committing suicide. As in case of drowning so also in case of strangulation, prompt action is necessary. Contrary to what occurs in natural death, the nostrils of a strangled person are distended, and the eye-balls project. The face of a strangled person is blacker, of a livid color. The pressure of the rope around the neck stopping the circulation of the blood, causes the dark color in the face. The stopping of the breath being the immediate cause of death, is why we should treat the patient the same as one who has been under water too long.

Drunkenness.

Whenever you find a person so far intoxicated as to appear to be dead, which is sometimes the case, you should proceed thus :

Raise the head and loosen the clothes immediately. Rub the patient the same as in case of suffocation from remaining too long under water. If possible he should be placed in a large, well ventilated room. Place him in a horizontal position with his head a little to one side to favor vomiting. Tickle the back side of his throat with a feather in order to excite vomiting ; but this may fail, in which case you should give him an emetic as soon as he can swallow. If the case is a very severe one give an injection of common salt. In case the vomiting is likely to prove too severe, or if nausea continues too long, give effervescing draughts, such as soda or seidlitz water.

If the feet and hands are warm, cold water may be freely applied to the head by means of cloths; but if the feet and hands are cold, every means should be taken to restore warmth.

There are undoubtedly many drunkards who have often resolved to drink no more, but when an opportunity presents itself the temptation was too great to be resisted. Now, if anything can be found that will destroy the taste for intoxicating drinks, it wo'd be a blessing to make the discovery known to the world. There are nostrums extensively advertised, but I know of none better than those I shall give here. Do not think, however, that you can break off the vile habit, resume it again and again break away from it and so keep doing at your pleasure—you cannot, and the safest way is to refrain from visiting places where such liquor may be found. Keep away from temptation. If so-called friends ask you to drink, respectfully inform them that you have firmly resolved to

"Close your teeth and not undo them
To suffer wet damnation to run through them.

No matter how urgently they entreat you to drink "just this once," consent not—just one glass might work your ruin. If you do not take the first glass you are safe, but take the first glass and you are in danger. If you have long been accustomed to use intoxicating drinks to excess, you have a hard job before you to break away from the demon of intemperance, but be firm and you may be free again.

Make a tea of bayberry bark, and add a little cayenne pepper. Drink a swallow of this tea just before each meal and any time when your craving for strong drink comes on. Have plenty of good cool water where you can take a drink at any time you may feel thirsty.

If the craving for liquor begins when you cannot get a swallow of the tea, rinse the mouth with cold water and drink as much as you want. If you quench your thirst with cold water, your cravings for whiskey and other intoxicating liquors will not be as great. If possible keep some of the above tea where you can get it. Follow this practice as long as may be necessary.

A reformed drunkard gave me the following recipe and said that it had cured him and a number of his friends :

Mix 6 grains of sulphate of iron, and 10 grains of magnesia in $\frac{1}{2}$ an ounce of peppermint essence; then add $\frac{1}{4}$ of an ounce of tincture of capsicum. Take a few drops on sugar before each meal. A few drops should be taken whenever you feel as though you wanted your accustomed dram.

Avoid the use of alcohol as much as possible even as a medicine. Request your physician to prescribe something else if he knows of any other remedy that will do as well in your case. If you must use liquors in preparing medicines, then use pure alcohol instead of brandy or any of the preparations from alcohol. Also avoid as much as possible the use of wine. I am aware that many suppose that wine made from fruit does not contain any alcohol unless it has mixed with it some kind of spirits, but this is a mistake. There is some alcohol in all kinds of wine. Let me therefore warn you not to use it.

If the patient has delirium tremens give him a good smart emetic, and after that a shower bath. Let him drink freely of beef tea. After the bath rub him well and put him to bed. He will probably sleep, which is just the thing required.

Suffocation.

Choking sometimes occurs from breathing certain gases, such as chlorine gas, hydrogen gas, carbonic acid gas, etc. Carbonic acid gas is probably the most common cause of suffocation. It is frequently found in rooms where charcoal has been burned, but that is by no means the only place to guard against it. As it is heavier than the common air it settles to the bottom of wells, hence the necessity of being careful about going down into a deep well. Never descend a deep well till you have lowered a lighted candle or lamp, and if it will not burn you must not go down till you have cleansed the well of gas.— This gas is also often found in large vats and in any such places that have stood empty for some time.— This gas has no smell, and when pure its deleterious effects are almost instantly felt.

Hydrogen gas is also destitute of smell when it is pure. It is most frequently met with in underground mines, but its effects are not so rapid as carbonic acid gas. Hydrogen gas makes a person feel sleepy, but the stupor induced is rather of a pleasing kind.

When a great number of persons are closely shut up in a tight room, deleterious effects sometimes follow. Breathing the air without getting a fresh supply, increases the carbonic acid gas and thus the bad effects are produced.

Headache, confusion of vision, and ringing in the

ears, are among the symptoms of breathing these gases. As a general thing the face will appear very pale while convulsions may ensue if the case is a severe one.

In the first place remove the patient into the open air and strip off all his clothing. Place him on his back with his head slightly elevated, and commence rubbing him and inflating his lungs as in case of drowning. The colder the air the better. Even in winter take the patient out of doors in the open air.

As soon as the patient can swallow, give him lemonade or vinegar and water. Bathe the face with vinegar and sponge the whole body with vinegar and water, but do not neglect the rubbing. Hold some strong smelling stimulant under his nose.

If necessary apply mustard poultices to the soles of the feet.—When the symptoms of recovery have unmistakably made their appearance, the patient may be placed in a warm bed, but it should be in a well ventilated room. Give him then hot stimulating drink, but only a little at a time. Red pepper tea would be excellent.

Intense Cold.

I am told that exposure to intense cold brings on a desire to sleep. This desire is almost or quite irresistible, but if yielded to is quite likely to result in the sleep of death. This desire to sleep arises from the slow chilling or freezing of the blood.

The further gone the patient is, the more care it will be necessary to use in restoring him. You should endeavor to bring back the natural heat of the body, but unless you are careful you may kill the patient in the attempt. Therefore make no sudden application of artificial heat. The heat should be very gradually and carefully applied. If this is done nothing serious will be likely to happen.

In the first place commence rubbing the body with snow or very cold water. Then rub with water a very little warmed. Then gradually increase the heat of the water until it is about as warm

as the natural heat of the body. If the patient does not breathe, inflate the lungs as directed in suffocation by drowning.

When all this has been done and the body seems nearly or quite up to its natural heat, place the patient on a bed in a comfortably warm room, and continue rubbing for some time. It will be best to have several persons rubbing at the same time. It will do some good to rub with a flesh brush, but it will be much better to have the patient rubbed with the warm hand. Whoever rubs should warm his hands well before commencing the operation.

Poison.

Under this head I wish to give some information that every man woman and child should know something about. If by accident or otherwise we, or any of our friends, chance to swallow a dose of poison, prompt treatment must be administered.

Most poisons when taken in sufficient quantity, either prove speedily fatal or cause derangements nearly or quite beyond the power of medicine to cure. Unless we know something of the nature of the poison swallowed, we cannot know exactly what to do, therefore it is important that we learn something about the different poisons and their effects on the human system.

If you keep poison of any kind, I would advise you to put it away in some safe place where no one but yourself can have access, and as another guard of safety have the word "poison" written or printed in plain letters and pasted on every bottle or package containing poison. Never neglect this.

Poisons producing mortification, destroy the lining membrane of the stomach and bowels about the same

as caustic or hot iron would destroy the skin. If the poison is sufficiently strong to injure the other coat of the stomach, mortification ensues and death soon follows.

It sometimes happens that poison gets into food when no one knows that any poison is in the house. Accidents of this kind need very prompt attention. If a person in usually good health is suddenly taken sick after eating, it is well to inquire "is he poisoned?" It may be also that some poison has in some way got into his drink. If there is cramp in the stomach with violent pain, and nausea followed by vomiting, it is quite likely the patient has been poisoned. Sometimes after being poisoned the patient will be seized with a sense of convulsive twitchings and a sense of suffocation, or he may feel a giddiness or unusual sleepiness.

As soon as you have reason to think a person has been poisoned, you should immediately send for medical assistance, but in the mean time you should know what to do and do it if possible. If there is any doubt about what kind of poison the patient has swallowed, you should save all the food, cups, glasses, etc., used by the patient just before being taken ill. If the patient vomits, save whatever he vomits up to be examined by the physician when he arrives.

If it is not possible to tell immediately the kind of poison swallowed, the following general rule may be adopted :

If the poison causes sleepiness or raving, give an emetic. Should it cause vomiting or purging, or pain in the stomach and bowels, give milk, butter, warm water or oil. If there is no inflammation about the throat, tickle it with a feather to excite vomiting immediately.

The quickest emetic known, probably, is made of salt, ground

mustard and warm water. Stir a heaping tablespoonful of fine salt and the same quantity of ground mustard into a glass of warm water, and let the patient drink it immediately. If it does not cause vomiting in two or three minutes, give another dose only half as large. After vomiting put the white of an egg into a cup of tea, coffee, or milk, or if you have neither put the egg into a cup of water and let the patient drink it. Please remember how this emetic is made, so that you may be ready at any time to order it when occasion requires.

I consider it useless in a book like this to take up each poison separately and tell all there is known about it. The following will be found such information as will be most likely to be of immediate use in cases of poisoning:

When poisoned with oxalic acid, sulphuric acid (oil of vitriol), nitric acid (aqua fortis), and hydrochloric acid, the symptoms are acute pain in the throat, stomach and bowels, with an acrid taste and frequent vomiting together with copious stools more or less bloody, and sometimes difficulty of breathing. The pulse is irregular, and, while the thirst is excessive, drinking increases the pain. Let the patient drink water in which considerable chalk has been mixed; or soap and chalk in water. The patient must vomit pretty freely or death will soon ensue. After the poison is got rid of, give a little slippery elm tea and be very careful about diet, eating only very little solid food for some time.

When poisoning is caused by alkalies there is great heat in the throat, and vomiting of bloody matter which effervesces if mixed with acids. To neutralize these poisons, give the patient vinegar and other vegetable acids.

Among the symptoms from taking verdigris, lunar caustic and corrosive sublimate, will be noticed the following: The tongue becomes dry and parched, while if there is not severe vomiting there will be fruitless efforts to vomit. There will be frequent black stools which will usually be bloody. The pulse will be quick and the breathing difficult, while the headache is intense. Mix the white of eggs with water and give one every two minutes. The patient should drink milk, gum-water, flax seed tea, or clear water as hot as it can be borne.

If the poison swallowed is lunar caustic, dissolve a tablespoonful of common salt in a pint of water and have the patient take a swallow as often as once in two minutes. The object of this is to decompose the poison, and when this is done give mucilaginous drinks.

I might extend information on this subject still further, but do not think it advisable in a work of this character.

Dislocated Limbs.

As it is easier to manage a limb put out of joint immediately after the accident, I consider I shall be doing a service to give some information on the subject. There should be prompt action, as it is much easier to put the limb in its proper place before inflammation and swelling take place. If you are in doubt whether or not the limb is really out of joint, compare it with the well joint on the opposite side. If it is just like that or if it can be moved in the usual way, it is not out of joint. If it is out of joint there will be a lengthening or shortening of the limb, and it will seem to be incapable of motion.

If it is found to be out of joint pull it forcibly, and gradually increase the extending force till the joint can be made right—While one person is pulling, let another raise the head of the bone over the edge of the cavity and put it in its proper place.

Broken Bones.

Should you ever chance to find a person lying speechless on the ground, carefully search and ascertain whether or not any bones are broken. If you make a sudden and careless attempt to raise him, the injury may be greatly increased.

Should a careful search convince you that a bone has been broken, proceed with great care. If his leg or his thigh is broken, make no attempt to raise him till you get a board. Then carefully place him on that and let two or four men carry him to his bed. Conveyed in this way he will not suffer half as much pain as if conveyed in a carriage.

Should it prove that the arm is broken in the upper part, place it in a sling with the palm of the hand turned towards the body. If the head is not injured he will probably revive soon, but if the head has received a very serious injury he will most likely remain senseless. In such a case more than usual care in the removal is necessary, but lose no time sending for an experienced surgeon.

If you receive a severe blow or fall on the side which causes considerable pain and renders breathing very difficult, the great probability is that one or more of the ribs are broken. A case like this demands great care and absolute rest. An attempt to be out of doors or attending to your regular business may cost you much pain or even your life.

Ear-Ache.

This troublesome ache is sometimes caused by indigestion. When this is the case put a little cotton in your ear and treat yourself as recommended for dyspepsia. If it arises from cutting the hair too short in cold weather, proper caution in this regard will be the remedy. If you are subject to the ear-ache, attention to the general health is the shortest and best way to cure it.

If the disease becomes chronic and ulceration takes place, there will be almost a constant discharge of disagreeable matter. The best thing in such a case is to keep the ear clean with frequent injections of blood-warm water slightly impregnated with castile soap. Further than this no local application will be needed unless a drop or two of some good liniment.

Sore Eyes.

I do not wish to give a great many recipes on this subject, but I will say that as I have myself been troubled with weak eyes, I am prepared to give some information that may be useful to those whose eyes are perfectly good.

I do not intend to make this book an advertise-

ment for nostrums, but there is one eye salve so very good that I think it is my duty to recommend it to every one who has sore eyes. Pettit's Eye Salve is decidedly the best thing for sore eyes of any kind that I ever saw or knew anything about. If reading this induces any one to buy a box of it, I know he will thank me for mentioning it. It is sold by nearly all druggists, and full directions accompany each box. I have no interest in recommending it only to make this book useful by giving such information as will be of service to every one who buys it.

I could give a score of good and genuine recipes for making eye water and eye salve, but it is useless as this salve is cheap and sure and is all you need in this line. I have known hundreds of persons to use it and never knew a case where it failed to do good.

Shaving the face sometimes causes the eyes to become sore and inflamed. I have been so affected myself, but a few applications of Pettit's Eye Salve make them all right.

To every one I would say do not read or do anything by twilight or any dim light that requires very close looking. Do not look directly at any dazzling light. If you have to sleep where the moon shines into your face, or at any time when it is too light, place a silk handkerchief over the eyes so as to exclude the light. In this way I have slept in the day time almost as well as in the night.

Toast Water.

Toast the bread thoroughly but do not burn it. Before pouring in the boiling water put in a little lemon peel or orange peel with the toasted bread.

This makes one of the best drinks for the sick, and may be freely used in fevers.

Slippery Elm Tea.

In fevers, and in fact almost all diseases, a demulcent is useful. Slippery Elm tea is one of the best demulcents ever used.

Take a sufficient quantity of the bark either pulverized or cut up into small pieces. Put it into a suitable dish and pour boiling water on to it. Let it stand awhile and then strain it. If it is not sufficiently nutritious, increase the quantity of bark and add a little sugar. It may be made still more pleasant by flavoring with cinnamon or something else pleasant to take.

Common tea is too stimulating and should not be used in sickness. Instead of common tea use sage, catnip or mint tea. These teas when taken hot are more sudorific than diuretic; but when taken cold are more diuretic than sudorific, though they possess these qualities to some extent in either case.

When cooling drinks are needed after perspiration is established, weak lemonade is good, also cream of tartar water and orange water.

Barley Water.

This drink is made as follows:

Take an ounce of pearl barley and with cold water wash out all the dust. Then cover it with boiling water and let it stand for ten or fifteen minutes. Then pour off this water and throw it away. Then pour on one quart of water and boil it down to one pint, after which it may be strained and properly seasoned. If more nutriment is required, put in a little licorice root before boiling the water down. Sliced figs and bruised raisins may also be added to increase the nutriment.

Another very pleasant drink is sometimes made by cutting two or three tart apples into slices and then pouring on boiling water. Only a little or considerable water may be poured on to suit. It may be sweetened if thought best.

Lemon Tea.

Put the peelings of one large lemon into a pitcher, and add a quart of water. This will probably be sufficiently strong, but if not, when it is cold a little lemon juice may be added. Sweeten it with refined sugar.

Flax-Seed Tea.

Pour a pint of boiling water on to an ounce of the seed. It will be still better to use the same amount of water on an ounce of flax-seed and half an ounce of licorice root.

Buttermilk is an excellent drink to be used in fevers when something cooling is required.

Indian meal gruel is sometimes used but if used in fevers it should be very thin. Better not use it at all in fevers, it is too heating.

Beef Tea.

Take half a pound of good juicy beef steak. It should be weighed after the skin and fat have been removed. Put it into one quart of water and set it on a stove in which there is but little fire, so that it may heat very slowly. Keep up a gentle heat for two or three hours, but do not let it simmer. Stir it occasionally. Then increase the heat and let it boil gently for about fifteen minutes, but before it commences boiling add a little salt. If any skum arises on it at first, it should be removed. After boiling, strain it.

I might give many more recipes similar to these, but I think it will not be necessary to do so. Of course such things are to be used with discretion.

Wintering Bees.

Different methods are practiced in wintering bees. It is necessary to protect them especially from two things—from being frozen and from being starved. The latter happens when they collect together in the coldest weather, and the comb becomes covered with frost and ice, the moisture from the bodies and from the air being there deposited and frozen, excluding them from the honey. The entrance to the hive is liable to be stopped with ice, and the bees thus suffocated. The bee never passes into the torpid state in winter like some other insects; it perishes at a degree of cold low enough to freeze it. As in the case of other kinds of farm stock, it requires less food when kept warm and comfortable. If the hives are to be carried into a house or cellar, the place for them should be cool, dry and dark. The best method is to house them, unless sufficient protection can be given them on

the stands. The Russian and Polish bee-keepers, who manage bees as extensively and successfully as any, winter their hives on the stands; but they make their hives of inch and a half plank, and wind the upper part with twisted ropes of straw and cordage to increase the protection against the extremes of heat and cold. If left on the stands, hives made of common boards need additional covering; the entrance should also be narrowed so as to leave only space enough for a single bee to pass. This must not be allowed to become stopped with frost and ice, dead bees and filth. Light snow may cover the hive without danger. The practice of bee-keepers is about equally divided between these two modes of wintering. The success of out-door wintering would be greatly increased by making better hives, and by exercising more care in protecting them from severe cold, and from changes of temperature. It is easier and preferable when the number of hives is very large, and there is no danger of theft, to manage them out doors. With a small number it may be otherwise.—*New Amer. Cyclopaedia.*

I have selected the above, in order to make this book useful to all classes, and what has just been given may suit some one better than anything else. Sometime you may wish to get a little honey from the hive and not destroy the swarm. Do it in this way :

Commence your work early in the morning of a day that you have every reason to think will be calm, sunny and pleasant. In the first place, set a table only a few feet from the hive, and cover it with a thick linen cloth. For a common sized hive, take about one sixth part of an ounce of chloroform, or a little more will do no harm. If it is a very large hive you will want one fourth of an ounce or perhaps more—you must proportion to the size of the hive and number of bees. Put the chloroform on a shallow plate and set it on the table. To prevent the bees from coming in immediate contact with the chloroform, cover the plate with wire gauze. Then take the hive from its place on the stand and set it on the table, so the plate will be in the center. This must be done cautiously but quickly. Now cover the hive closely with cloths, and let it alone for about twenty minutes. In that time the chloroform will have put all the bees to sleep, and they will be found in a helpless and harmless condition on the table. You can then take out what honey you want, and replace the hive in its old place exactly where you took it from. When the bees recover from the effects of the chloroform they will return to the hive.

It is pretty generally known that the effect of being stung by a bee is more severe than the effect of a wasp sting. The reason of this is that the sting of a bee is barbed at the end and consequently left in the flesh. The sting of a wasp is pointed and as it

is not left in the wound a wasp can sting again. As the bee leaves the sting in the wound it cannot sting the second time.

If you are ever stung by a bee you should either pull the sting out yourself, or have some one else do it. This should be done immediately because the longer it is left, the farther it will work its way into the flesh, and the more of the poison it discharges into the wound.

The sting being hollow, the poison flows through it into the flesh, and this is what causes the pain and inflammation. The sting should be pulled out, carefully and with a steady hand in order that it may not be broken in the operation, for if any of it is left, it will continue to cause pain and inflammation for some time. As soon as the sting is pulled out, if the wound is in a place that you can get at, suck it to prevent further pain and inflammation. If you can get some aqua ammonia, apply a few drops immediately after sucking the wound. On many persons the sting of a bee or wasp produces no effect except the pain, which lasts only a minute or two. If you belong to that class now, you may belong to the other class sometime, for sometimes a sting does not affect a person, and by another year it will affect him violently, therefore it is well for you to remember what I have said. Sweet oil, tobacco, and other things have been recommended for a sting, but the remedy I have already given is the best I know of. Sweet oil and tobacco are not half as good as aqua ammonia. Bees or wasps are more apt to sting a person who is sweaty than one who is not, therefore when you wish to go among bees you will do well to govern yourself accordingly.

Harvesting Buckwheat.

The excellence of buckwheat flour depends chiefly on the management of the grain between the time of ripening and grinding. The common way of treating buckwheat effectually prevents making good flour, it being allowed to remain in the swath for several weeks, when it should never be suffered to lie longer than a day or two, and it is decidedly better for the grain to rake it, and set it on end as fast as it is cradled. Much less grain will be wasted by shelling out; the straw will cure and dry out sooner, and make better fodder; the crop will be ready for threshing and housing in less time; and the grain will yield a much better quality of flour. It is especially injurious to the grain to be exposed to storms before it is set up, for dirt is spattered all over the grain by the falling of large rain drops. Wetting and drying the grain several times destroys the "life" of the flour. It will never be so white, nor make so good cakes, but will be sticky and the cakes clammy, like the flour of sprouted wheat.—*American Agriculturist*.

Buckwheat Flour.

A lady of culture, refinement and unusual powers of observation and comparison, became a widow. Reduced from affluence to poverty, with a large family of small children dependant on her labor for daily food, she made a variety of experiments to ascertain what articles could be purchased for the least money, and would at the same time "go the farthest," by keeping her child-

ren the longest from crying for something to eat. She soon discovered that when they ate buckwheat cakes and molasses, they were quiet for a longer time than after eating any other kind of food.

A distinguished judge of the United States court observed that when he took buckwheat cakes for breakfast, he could sit on the bench the whole day without being uncomfortably hungry; if the cakes were omitted, he felt obliged to take a lunch about noon. Buckwheat cakes are a universal favorite at the winter breakfast table; and scientific analysis has shown that they abound in the heat forming principles; hence nature takes away our appetite for them in summer.—*Hall's Journal of Health.*

To Find Water.

A gentleman related his experience in this matter. An Irishman in his employment, in order to ascertain where he ought to dig to obtain water soonest, got a stone and buried it over night in the ground next to the hard pan. In the morning he found it quite moist, but not sufficiently so to suit his fancy. Next night he tried it in another spot, and it was found very wet on the following morning. Said Patrick, "you will find water not many feet deep, and plenty of it." Sure enough, in a few days digging, Patrick confirmed his prediction, notwithstanding the jeers of the workmen, finding a vein that filled the well to overflowing, and rendering it exceedingly difficult to bail out the water so as to stone it. The philosophy of the operation seems to be that as the great evaporation takes place from the surface of the earth during the night, water rises up from the depths below to supply the loss and accumulates in the vicinity of the stone, often making quite a puddle.

How to cut and trim Pork.

The following directions, says the *Baltimore Sun*, may be found useful at the killing season, to such of our readers as are able to "go the whole hog:"

Have the hog laid on his back on a stout table. Clean the carcass of the leaf fat. Take off the feet at the ankle joints. Cut the head off close to the shoulders, separating the jowl from the skull, and open the skull lengthwise on the under side; so as to remove the brains fully. Remove the backbone in its whole length, and with a sharp knife cut off the skin—then the fat, leaving only about one-half an inch of fat on the spinal column. The middlings or sides are now cut from between the quarters, leaving the shoulders square, and the ham pointed, or it may be rounded to suit your fancy. The ribs are next removed, partially or entirely from the sides. The trimmings or fat from the hams, and flabby part of the sides, are rendered up with the backbone strips for lard. The sausage meat is cut off from the leaf fat and ribs; and other lean pieces are used for the same purpose. The thick part of the back bone, that lies between the shoulders, is called the chine; it is cut from the tapering, boney end, and the latter part called the backbone, by way of distinction. The backbone should be used while fresh—the chine is better after being smoked.

Toads.

Never kill the toad that frequents your garden. Not by any means noted for their beauty, they are, nevertheless, very useful in destroying insects, particularly those that fly in the night.—Toads feed almost exclusively on insects, and the amount of good they do is immense. If we could always reconcile ourselves to the old adage, "Handsome is that handsome does," and conquer our prejudices, we should consider the toad as a true friend. A young lady once told us that she "perfectly doated on aligators." It would be much more sensible to fix her young affections on toads.—*Ploughman.*

I give the above a place here because I consider the advice good and much needed. Toads may be ranked among the gardener's best friends. Do not molest them in any way. If you meet with a toad in your walks convey him carefully to your garden, where he will be of some service to you. They will not hurt you, but unless you handle them carefully you will hurt them.

Fattening Calves.

A sensible practical farmer told us the other day that he had often noticed that calves would thrive better on milk that was not rich in butter, than on what was commonly called very rich milk. That is a fact in accordance with what we recently stated, that the nutritive elements of milk reside chiefly in the caseine. If you have a cow that gives particularly rich milk and one that gives a quality poorer in butter, it is better in every way, to feed the calf on the milk of the latter. The calf will thrive better, and you'll get more butter from the milk of the first cow.—*Ploughman.*

Not long since I remarked in the hearing of a farmer that I was writing a recipe book, and he handed me the above which he said was really good.

Warts on Cattle.

A subscriber says that his cow has warts upon her bag and teats "long and slender," and asks how he can cure them. The warts can be readily removed with caustic, lunar or potash. Five cents' worth of either lunar caustic or potash will suffice. Keep the caustic in a vial, take a stick of it, wet the end with water or spittle and rub it on the warts. Two or three applications will

suffice. Be very careful with the caustic of potash or it will eat too deep and make a sore. We took a large wart from the leg of a valuable horse by two applications of potash, and it has not returned.—*N. H. Farmer.*

The same farmer who gave me the previous recipe also gave me this, saying he doubted not some one would thank me for publishing it. A few years ago I met a man selling recipes to remove warts from cattle. As he charged five dollars for the recipe I did not buy it. He kept a sample in a small vial, and a farmer who bought the recipe told me if I knew where to buy some potash there would be no need of my buying the recipe. This leads me to think that this is the same thing that the traveling agent charged five dollars for.

Cautions for those Having Sheep.

We copy the following excellent suggestions about sheep, from a circular issued by E. C. D. McKay, Esq., the general agent of the American Emigrant Company. The company have already over 10,000 sheep scattered among the farmers who have purchased land of them, in flocks ranging from fifty to two hundred head:

1. Keep sheep dry under foot with litter. This is even more necessary than roofing them. Never let them stand or lie in mud or snow.
2. Take up lamb bucks early in Summer, and keep them up till December first following, when they may be turned out.
3. Drop or take out the lowest bars as the sheep enter or leave a yard, thus saving broken limbs.
4. Count every day.
5. Begin graining with the greatest care, and use the smallest quantity at first.
6. If a ewe loses her lamb, milk daily for a few days, and mix a little alum with her salt.

7. Let no hogs eat with sheep—by no means in the Spring.
8. Give the lambs a little mill-feed in time of weaning.
9. Never frighten sheep if possible to avoid it.
10. Sow rye for weak ones in cold weather, if you can.
11. Separate all weak, or thin, or sick, from those strong, in the Fall, and give them special care.
12. If any sheep is hurt, catch it at once, and wash the wound, and if it is fly-time apply turpentine daily, and always wash with something healing. If a limb is broken, bind it with splinters, tightly, loosening as the limb swells.
13. Keep a number of good bells on the sheep.
14. Don't let the sheep spoil wool with chaff or burrs.
15. Cut tag-locks in the spring.
16. For scours, give pulverized alum in wheat bran—prevent by taking great care in changing dry for green feed.
17. If one is lame, examine the foot, examine between the hoof, pare the hoof if unsound, and apply tobacco, with blue vitriol boiled in a little water.
18. Shear at once any sheep commencing to shed its wool, unless the weather is too severe, and save carefully the pelt of any sheep that dies.

I insert the above here because I doubt not the hints will be of service to some one who would neglect what he already knows, were it not for being put in mind of it in some such way as this.

Blanketing Horses in Winter.

This is often wrongly done. When the horse becomes heated by hard labor or long traveling, the blanket thrown on his back at once—the vapor steams up from his hot sides, becomes condensed and wets the blanket, and as the horse continues to cool, the cold and wet covering is of little use. A better way is to let the animal stand uncovered for a few minutes, a longer or shorter period, according to the circumstances, until cooled down to about the ordinary temperature, but not to any degree toward chillness, then throw on a dry blanket. Farmers sho'd remember this fact.

I have not much advice to offer about horses, but a few words may not be entirely out of place. Probably every one knows that it is difficult to get horses out of a barn that is on fire. In such a case throw a blanket over their eyes, or throw the harness on and lead them out.

Only a few days since I saw a man trying to make a balky horse pull, but without success. Another man came along and said "If you want that horse to pull, put some dirt in his mouth!" The owner then dug up a little of the fresh earth, and put into the horse's mouth. The result was that the horse started along and pulled well.

While I am speaking of horses, I may as well add the following from a paper that contains many good things :

Bed Your Stables.

A horse will get tired standing and treading on a hard floor ;—so will a cow, a sheep, a man. A soft bed feels easy, and gives rest. And yet we neglect the bedding of our stables to a great extent. Injured limbs and other ailments, especially of the hoof, are the result often of a neglect here, as has been clearly enough shown, and as any man can clearly enough see, if he gives the subject a moment's thought. Bed with straw, which is plenty, or sawdust, or tan bark, or shavings. The drier these materials are the better. Every day remove the moistened bedding and replace it with new. Such a floor, well bedded, adds greatly to the warmth of a stable, and thus becomes a fodder saver. The small holes and crevices in a floor with a good bedding upon them, will let little or no cold through, and will drain the stable. Rather have a ground floor than hard, naked plank.—*Rural World.*

To make the best Sausage.

Thirty pounds of chopped meat, eight oz. salt, two and one-half ounces pepper, two teacups of sage, and one and a half do. of sweet marjoram. Pass the two last through a fine sieve. If you prefer it, thyme and summer savory may be substituted for the latter.

One kind of Bologna sausages are made of equal parts of bacon, beef, veal, pork and beef suet, seasoned to suit. You can have the beef, veal, and pork as fat or as lean as you please.

Sausages may be smoked the same as hams.

Let me advise you never to use any sausages unless you know who made them, for of all things that are adulterated, the most offensive is the adulterated sausage. It is a fact that cannot be reasonably doubted that many sausages are composed in part of horse, hog and dog, together with diseased animals and many odds and ends by no means pleasant to think of, especially when we think we have been hiding them in our stomachs.

If you are fond of sausages, and determined to have them any way, I advise you to get a meat-cutting machine and make your own. Then you will know whether you are eating dog, horse or hog. If you don't care what you eat, your machine will save you some expense, for you can cut up the old dogs and make them into sausages for your own use. But I presume if you conclude to have a meat cutting machine, it will be for a more pleasant use, that is, you can be sure of having sausage not made of dead dog.

To Place Fence Posts.

If the small end of posts are placed in the ground, they will last much much longer than if placed with the butt ends downward.

To Cleanse the Hands from Dye Stains.

Pour a thimble-full of the oil of vitriol into a basin of water, and wash without soap. When the stains are entirely removed, and not before, wash completely in clean water, (if warm so much the better,) using no soap until the acid is entirely off.

To whiten the hands, wash them clean, and just before going to bed, wet them a little with soft water; then take some castile

soap, and passing it through the hands and thus getting considerable soap on the hands, let it dry on and stay there till morning. This way is cheap, simple, easy, harmless, and sure.

Boiled Potatoes for Milch Cows.

A successful farmer informs us that he has practiced the last summer, giving to each of his milch cows five quarts of boiled potatoes a day, and they were worth for that purpose half a dollar a bushel. His old potatoes were worth nothing in the market, and so he boiled up some twenty-five or thirty gallons at a time. He says that he could see no benefit whatever from giving them old potatoes in a raw state. There is a period from the first of July to the first of August when cows need some additional food, and if boiled potatoes will help them hold out their milk till it is time to feed out the Southern corn, we may hope to carry cows through the whole summer season in a condition to yield a good profit, especially on farms remote from the market.—*Maine Farmer.*

Dont forget that frequent change of food is important for cows that give milk, in any season of the year. Cows tire of one kind of food and will always do better if frequent changes are made. I think that if more cabbages were raised and fed to milch cows, it would be an advantage.

Sunshine in Parlors.

The horror of sunshine, by no means too abundant in this region, has more to do with the fear of discoloring curtains and carpets than it ought to have, especially among the rich. What signifies the fading of a few colors, easily replaced, compared with giving a proper welcome to the great colorer himself—the sun, that makes all things beautiful? There are few sights in your town houses more cheerful than a sudden burst of sun into the room, smiting the floor into so many windows, and making the roses on every carpet look as if they felt it. Let them fade in good season as the others do; and make up for the expense, dear fashionable people, by staying a little more at home, keeping better hours, and saving the roses on your cheeks.

In another place I have spoken of the importance of sunlight, but seeing the above in a paper, I was again reminded of the importance of sunshine, and therefore concluded to give the above. When we

learn more fully the importance of sun-light, we will not shrink so much from being tanned a little.

“Oh ! blessed be the sun-light,
It is the smile of God—
It cheereth up the spirit,
And warmeth up the blood.
So let it shine upon you,
And bask ye in its rays,
Quite likely it will tan you,
But 'twill lengthen out your days.”

Nest Eggs.

To have a supply of these, indestructible to heat or cold, just empty some eggs as you need them, through as small an aperture as possible : mix up with water to the consistency of cream some pulverized plaster ; fill up the shell brimming full ; when they have hardened, if you choose to peel them, you will find them perfect ; and if you think your Brahmas will be fastidious about color, a little annatto mixed in will render the illusion perfect.

The higher you can have your fowls roost from the ground, the better. They never roost low from choice, and you should provide them with a roosting place pretty well up. When fowls roost near the ground, numerous diseases are brought on by the ground being saturated with their droppings.

Clover Hay.

Clover hay is much better for sheep, than grain, unless it is for ewes about yeanning time. Give the ewes along in the season, plenty of clover and some oats. If you feed them with timothy, give them Corn. Clover hay for sheep should be cut in blossom. Give them plenty, and they will need no turnips or potatoes to keep them in good order. It is best to commence feeding the ewes with clover and oats early in the winter, but along at first give only

a very small allowance of oats, and increase it gradually, as lambing time approaches.

Points of an Excellent Milch Cow.

A cow of beautiful symmetry is eminently desirable, as the physical beauty of any animals always enhances their cash value. Yet, beauty and superior milking qualities are seldom found in one cow. There are certain signs which can usually be relied on as indicative of a superior animal for milk in large quantities, yet of an inferior quality, either for butter or cheese, providing the cow has been properly reared, and her milking qualities not impaired in any way by improper management, which often misleads, or deceives a purchaser, when he is confident he is selecting a good milker.

The first and always infallible indication of a superior milker, is an udder and teats of medium size and of fair proportions. Let us see no part of a cow but these, and we will select the best milkers and reject the inferior ones with almost unerring certainty. A poor milker may be detected at a glance, not by a homely form, but by a small udder, and teats too short and diminutive to be grasped by a hand of ordinary size. If a cow be deficient in these points set it down against her, that she will never be a superior animal either for butter or milk, except in a small quantity. A cow having a long disproportioned udder, with teats as large as a man's wrist, may possess the qualities of a medium milker, but will never be found to yield as much rich milk as a cow having a square udder, about as large as a ten quart pail, and four teats only, a good distance apart, and nearly as long as the width of a man's hand.

In addition to these signs of a milker, the color of the skin is one of the most important indications of a superior cow for rich milk. A cow having a black or white skin may give a large quantity of milk, but it will be thin and white, often requiring from one-third to one-half more to a pound of butter or cheese, than the milk of a cow having a yellow skin. If a cow having a yellow skin, whether she be of a red, brindle, white, roan, brown, or any other color, and her hair feels like velvet, and she have an udder and teats of the size and form just alluded to as indicative of a superior milker, if she be as homely as the old red cow with a "crumpled horn," that we read of in the story of "the house that Jack built," we may feel assured that she will give rich milk.

Another sign in connection with the other good ones, is a striped hoof, although striped hoofs may be seen on poor cows. But, if a cow have a yellow and soft skin, and a yellow or striped hoof, it shows that she will always give milk of an excellent quality, though she may yield but a little of it. A cow having black hoofs will seldom yield rich milk.

Steamed Brown Bread.

Take 1 quart of Indian corn meal, 1 pint of wheat flour, 1 quart of sweet milk, 1 teacupful of molasses, 1 teaspoonful of saleratus,

and 1 teaspoonful of salt. Mix and steam $2\frac{1}{2}$ hours. Then bake $\frac{1}{2}$ hour.

This makes the best brown bread I ever ate, and I have eaten a great many kinds. For a change rye or Graham flour can be used.

Rich Tea Cakes.

Take 4 eggs, 1 pound of wheat flour, 1 pound of sugar, $\frac{1}{2}$ pound of good butter, 1 pound of raisins, 2 gills of cream, 1 gill of rose water, 1 nutmeg, and $\frac{1}{2}$ a teaspoonful of soda.

These ingredients properly mixed and baked, make very rich and good cakes. Indeed they are pronounced perfectly splendid. Many wedding cakes are not half as good as cakes made with the above-named ingredients. If you want some cheaper tea-cakes, you may make them after the following recipe, but they are not quite as good.

Take 1 pound of wheat flour, 4 ounces of sugar, 3 ounces of butter, a very little soda, 5 or 6 ounces of water, and 6 ounces of milk. Rub the butter into the flour, and dissolve the sugar and soda in the milk. Then proceed in the usual way of making cakes.

Sponge Cake.

Beat the whites of 10 eggs to a froth; beat the yolks in another dish; then put together and beat with the sugar; this done, stir in 12 ounces of flour and season with cinnamon.

CHEAP SPONGE CAKE.—Take 3 eggs, 3 cups of sugar, 1 cup of milk, 1 teaspoonful of saleratus, a little salt and spice, and flour enough to make a good stiff batter. Do not be more than 20 minutes in baking.

Wonders.

How these cakes got their name is more than I can tell you. Here are the proportions of ingredients for making them. They are said to be very rich and good :

Take $\frac{1}{2}$ a pound of butter, 2 pounds of flour, 10 eggs, $\frac{1}{2}$ a pound of sugar, and flavor with cinnamon.

Wedding Cake.

The following are the correct proportions of ingredients for a good wedding cake :

Take 24 eggs, 3 pounds of butter, 3 pounds of sugar, 4 pounds of flour, 4 pounds of currants, 2 pounds of raisins, 2 gills of rose water, 3 nutmegs, 1 ounce of mace, and $\frac{1}{2}$ a pound of citron.— These proportions may be varied a little if thought best, but do not vary them much if you want a really good cake.

Breakfast Cake.

Take 1 quart of flour, $\frac{1}{2}$ a dozen eggs, 4 ounces of butter, and 2 ounces of sugar. Mix the butter with the flour; beat the eggs and add a sufficient quantity of milk; pour this gradually into the flour, and add a teaspoonful of salt; work for 10 minutes.— Now take a knife and cut the dough into chunks of the proper size, and roll them out as thin as you want them. Bake quick.

Nice Cake.

One cup of cream, $\frac{1}{2}$ a cup of butter, $1\frac{1}{2}$ cups of sugar, 2 eggs, 1 teaspoonful of saleratus, and the proper amount of flour.

Pound Cake.

Six eggs, 1 pound of sugar, 1 pound of flour, 3 spoonfuls of rose water and spice to suit the taste. A little butter is needed.

Cup Cake.

One cup of butter, 2 of sugar, 3 of flour, and 4 eggs, together with a sufficient quantity of nutmeg and soda.

Bride's Cake.

Take the whites of 10 eggs, 12 ounces of sifted loaf sugar, $\frac{1}{2}$ a pound of butter, 3 spoonfuls of milk, a very little saleratus, but no spice. Use your own judgment as to the amount of flour.

Delicate Cake.

Take the whites of 8 eggs, 2 cups of sugar, 2 cups of flour, and 1 cup of butter

Drop Cake.

One pound of flour, 1 pound of sugar, the yolks of 10 eggs, the whites of 2 eggs, and rose water, nutmeg, etc., to suit the taste.

Queen Cake.

Take 1 pound of butter, 1 gill of rose water, 1 pound of flour, 1 pound of fine sugar, 2 eggs, $\frac{1}{4}$ pound currants. These ingredients properly combined and baked, are said to make excellent cakes.

Composition cake.

1 pound of flour, 1 cup of sugar, $\frac{1}{2}$ a pint of cream, 4 ounces of lard, and 6 eggs.

Lemon Cake.

Take 1 cup of butter, three cups of powdered sugar, rub to a cream. Then stir in 1 whole egg and the yolks of 5 more; which have been well beaten, also 1 teaspoonful of saleratus and a cup of milk. Add enough lemon juice to suit the taste, and four cups of flour. Bake half an hour or a little more.

Gold Cake.

Take the yolks of 3 large eggs, 2 cups of brown sugar, 1 cup of butter, 1 cup of milk, 1 teaspoonful of saleratus, and enough flour to form a batter of the usual thickness. The yolks should be well beaten, and I think that six instead of three should be used.

Silver cake.

Take the whites of 5 eggs, and beat them to a froth, 1 cup of milk, 1 teaspoonful of saleratus and as much flour as is needed. Flavor to suit the taste.

Snow cake.

Take 1 pound of flour, 1 pound of fine white sugar, $\frac{1}{2}$ pound of butter, 1 gill of rose water, and the white of 16 eggs.

Loaf cake.

Two pounds of flour, $\frac{1}{2}$ a pound of sugar, 4 ounces of lard, 3 eggs, 1 gill of milk, a few drops of rose water, and $\frac{1}{4}$ a teacupful of sweet yeast. For spice, use cloves or nutmeg or both.

Coffee Cakes.

Take some rice that has been boiled soft; then take as much flour as rice, and half as much Indian meal as flour, and a little yeast. Mix with a sufficient quantity of water and let it rise over night. This can be made into biscuits for morning use.

Dough Nuts.

Take 1 cup of new milk, $\frac{1}{2}$ a cup of sugar, 1 teaspoonful of saleratus, 1 teaspoonful of salt, and flour enough to make of the proper thickness.

GOOD DOUGH NUTS.—Three cups of sugar, 2 eggs, 1 cup of butter, 1 pint of buttermilk, 2 cups of cream, 1 nutmeg, with saleratus and flour.

COMMON DOUGH NUTS.—One pound of flour, 4 ounces of butter, 4 ounces of sugar, 2 eggs and spice to suit.

CHEAP DOUGH NUTS.—One cup of sweet milk, 1 cup of sugar, 1 teaspoonful of saleratus, and a sufficient quantity of flour. Put in salt and spice to suit.

Ginger Bread.

One cup of molasses, 1 of water, a small piece of butter, 1 large spoonful of ginger, and a teaspoonful of saleratus.

BAKER'S GINGER BREAD.—One pound of flour, 1 quart of molasses, 6 ounces of butter, 1 ounce of saleratus, and 1 ounce of ginger.

FAMILY GINGER BREAD.—Five cups of molasses, 2 cups of boiling water, 4 teaspoonfuls of saleratus, a small piece of melted butter, and enough flour to make it sufficiently stiff. Roll thin and bake in pans.

Pastry.

The following remarks on pastry will be useful:

Heat is said to render pastry heavy, and it should, therefore be prepared in a cool place. For pastry you should get the very best quality of flour, and keep it in dry jars covered so closely as to exclude the air as much as possible. In this way you will be able to have lighter and better pastry. When butter is used in making pastry it should be well washed in pure cold water, to extract most of the salt.

About half a pound of shortening is usually used in making a common pie crust, but the proportion may be increased or diminished to suit. If you care more for the looks than the taste of your pie crust, use only lard for shortening; but if you put in some butter, it will make it taste better. Bake in a quick oven if you want your pastry nice. If the weather is very cold the shortening should be warmed a little before using, but it should not be melted, for that will render the pie crust flaky.

Pastry is considered unwholesome when eaten too freely. Children should not be allowed to eat too freely of it at any time.

Johnny cake.

Put 1 quart of sifted corn meal into a pan, and after making a hole in the middle pour in a pint of warm water. The meal and water should now be gradually mixed, and a teaspoonful of salt added. It should be beaten very fast and for some time. Unless it is well beaten till it becomes pretty light, it will not be good. After it has been thoroughly beaten, spread it out thick and even to bake. If a few teaspoonfuls of wheat flour are added it will be an improvement.

SUPERIOR JOHNNY CAKE.—Take 2 cups of Indian corn meal, 2 tablespoonfuls of molasses, 2 cups of sweet milk, 2 eggs, 1 cup of flour, and a little saleratus.

CORN CAKE.—Two cups of fine yellow corn meal, 1 cup of flour, 2 eggs, 2 spoonfuls of sugar. Then add enough buttermilk to make a thin batter, and pour into pans so it will not be more than an inch thick.

Short cake.

One pint of sour cream, $\frac{1}{2}$ a cup of butter, 2 eggs, with a little saleratus, and flour enough to make the batter pretty stiff.

Tea Biscuit.

Take 1 pint of sour milk, 1 teaspoonful of saleratus, and flour enough to knead; add a little butter and salt; then roll it out and cut into biscuits of the proper size.

Sponge Biscuit.

Beat the yolks of 12 eggs for $\frac{1}{2}$ an hour. Then put in a pound and a half of fine sifted sugar, and whisk it till it rises in bubbles. Now beat the whites of 12 eggs to a froth and whisk them well with the sugar and yolks. Then grate the peels of 2 lemons, and work them in together with 1 pound of flour. Bake in tin moulds buttered, in a quick oven for an hour. Before you put them in the oven to bake, sift a little fine sugar over them. The above proportions can be varied a little without material injury, but don't vary the proportions much or you may spoil the whole thing.

Bread.

The dough should be well and thoroughly kneaded. It is not good economy to purchase poor flour. Flour which has been recently ground and never packed in barrels is considered much better than old or barrelled flour.

When you take the bread out of the oven, if you set it flat on the table it will sweat and thus cause a bad taste. For this reason it is best to set it up endwise, and let it lean over a little against something. A cloth wrung out of cold water should be wrapped around the loaf, to prevent the crust from being thick and hard. Many have an idea that warm bread should not be eaten. I shall find no fault with those who hold that idea, but if we should not eat warm bread any faster than we do cold, it would not be likely to do us any great amount of injury. The principal reason why warm bread is injurious, is because those who eat it, fall into the fault of eating too fast and too much, and at the same time, of using too much butter. The next time you eat warm bread, do not eat any more of it than you would if it was cold, do not eat it any faster, nor use any more butter than you would on cold bread.

Pumpkin Bread.

There is no secret in making this bread; all you have to do is to add a sufficient quantity of well boiled pumpkin to the ingredients for making brown bread.

Rice Bread.

Boil one pint of rice soft, and add a pint of yeast. Use three quarts of flour and a little cinnamon; also one cup of sugar.— Bake the same as other bread.

Cream of Tartar Bread.

1 quart of flour, 2 teaspoonfuls of cream of tartar, 1 teaspoonful of saleratus, $2\frac{1}{2}$ cups of milk, and as much sugar as you please. Bake twenty minutes.

Sour Milk Bread.

In making this bread have your flour all ready, and after sweetening the milk with a sufficient quantity of saleratus, put in a little salt. Make it rather soft, and pour it into the pan to bake.

Graham Bread.

Take 3 pints of warm water, 1 teacupful of corn meal, 1 teacupful of wheat flour, a small amount of yeast, two spoonfuls of molasses, the proper quantity of salt and saleratus. Stir together, and then add as much Graham flour as can be easily stirred in.

There are more than a dozen ways of making Graham bread, but I think there is no need of giving them here. Some like the bread best when sweetened with sugar instead of molasses. Any one who understands cooking can vary the proportions to suit different tastes.

Potato Bread.

It seems to be a little more troublesome to make bread after the following recipe, than some other modes, but the quality of the bread over-balances all extra work. If your flour and yeast are good, it will insure you the very best of bread, less liable to sour than when made in any other way :

For 4 loaves, take a half dozen good sized potatoes, or small ones in the same proportion; wash clean, and boil until done, then mash fine and add 2 quarts of water, and run through a colander or sieve to take out the peelings; then take 3 or 4 table-spoonfuls of flour, and mix with water till about as thick as for starch, and add to the potato water. Then put in a half pint of good hop yeast, made as above, and set it in a warm place over night. In the morning stir in flour till thick as common rising, set in a pan of warm water, and if managed properly, you will have a light sponge in less than an hour; then knead in flour in the usual manner, adding a little salt and a small piece of shortening; let it rise, then mould into loaves, and when just light enough, put it in the oven and bake one hour.

Pudding.

Pudding bags should be made of sheeting sufficiently thick and close to exclude as much of the water as possible. Do not forget

to wring the bag out in water before filling it, and put some flour in the bag and rub it all over the inside surface. To prevent the pudding being heavy, do not fill the bag quite full, but leave room enough for the flour to swell. If you fill the bag too full you will have a hard and heavy pudding. Place the bag on an old plate in the pot. Do not let the water stop boiling after the pudding is put in. Keep the pudding completely covered with water. If the water boils down so low as to require more water, pour in boiling water, because cold water would injure if not entirely spoil the pudding. Just before taking the pudding out, it will be well to dip the bag in cold water.

Rice pudding, with Fruit.

Put 2 large spoonfuls of well washed rice in a pint of new milk. Then pare and quarter one common sized apple, and add it to the above with 1 ounce of dried currants, and two ounces of raisins. Simmer very slowly till the rice is sufficiently soft. Then add 1 egg that has been well beaten. This may be served with cream and sugar to suit the taste.

Pudding Sauce.

Take a pound of sugar, and 4 ounces of butter. Boil 15 minutes. Then add one tablespoonful of rose water, and a little nutmeg. Put all the above together with a large tablespoonful of flour, in a pint of water and boil a few minutes.

Mother Eve's Pudding.

Pare 6 common sized apples and cut them up into very small pieces after the cores have been taken out. Then take some bread and cut off the crust, and throw it away; crumble the rest up very small. Take also 6 ounces of dried currants, 6 ounces of sugar, 3 eggs which have been well beaten, and add to all of the above, salt enough to suit the taste, and flavor with nutmeg. Stir all of the above ingredients together and boil it gently for 3 hours. It should not be boiled fast, but when it commences boiling, it must not be allowed to stop for at least 3 hours. It may be served with or without sugar and butter. Most of those who have eaten it, pronounce it good enough with sugar and butter on it.

Bread Pudding.

Take 1 quart of milk and soak crumbs of dry bread in it till it is soft and as thick as butter. Then add 3 eggs, a little saleratus and sugar enough to sweeten it. Flavor with nutmeg, cinnamon, or anything that suits your taste. Then boil it three-fourths of an hour.

Boiled Bread Pudding.

Crumble up as much bread as you need for the pudding. Then pour on boiling milk and cover it up close. Let it soak 2 hours. Then beat it up, and add 4 well beaten eggs and a little cinnamon. Put this all into a basin just the right size to hold it, and

give it a little room to swell, but it will not swell much. The cloth tied over the basin should be floured on the side next to the pudding. Tie it on tight, and put it into boiling water.

Plum Pudding.

Break half a pound of crackers into small pieces and then put them into $1\frac{1}{2}$ quarts of milk. Let them alone till they are soaked soft, after which put in 4 ounces of melted butter, 4 ounces of fine sugar, $\frac{1}{2}$ pint of wheat flour, a little grated nutmeg, and 1 dram of muriatic acid. Then beat 10 eggs to a froth and stir them in. Now add half a pound of raisins, and 4 ounces of dried currants, with 3 ounces of citron, which has been cut into very small pieces. This may be either baked or boiled. It should be baked or boiled at least two hours.

Our Plum Pudding.

The following is our favorite pudding, and can hardly fail of proving a valuable addition to the cuisine of every housekeeper. It may be kept for a week, if it lasts that long, and be just as good as the first made :

1 cup suet chopped fine, 1 cup molasses, 1 cup milk, 1 cup seeded raisins, 4 cups flour. Add salt and spice to suit the taste. Boil in a covered dish 3 to 4 hours. Serve with wine sauce.

COMPOUND PLUM PUDDING.—Take 1 pound of flour, 1 dram of bi-carbonate of soda, 2 drams of muriatic acid, 8 ounces of beef suet, 6 ounces of dried currants, a little nutmeg and finely grated orange peel, 4 well beaten eggs, and 2 ounces of citron. This may be boiled, baked or steamed. It is best steamed, if well done.

SAGO PUDDING.—Boil a large tablespoonful of sago in 1 quart of milk. Then add a little lemon juice, nutmeg, grated orange peel, and 4 eggs. It will take from an hour and a half to two hours to bake this as it should be.

Hasty Pudding.

Boil as much water as you will need to make as much pudding as you want. The meal should be sifted and ready for use. As soon as the water in the kettle begins to boil, you can commence putting in the meal and stirring it. Have the meal standing in a pan near enough so you can reach it. It will take about half an hour to cook a pudding of this kind. It may be eaten with milk, but many prefer it sweetened with sugar or molasses. Corn meal is usually used for this pudding, but for a change, rye flour or a little wheat flour may be mixed in. An occasional meal of hasty pudding is good for dyspeptics and costive persons.

Cottage Pudding.

The following cheap pudding though called a "Cottage Pudding," is good enough for the palace. It is a favorite with many. Try it.

1 cup sugar, 1 cup sweet milk, half cup melted butter, 1 egg, 2 small teaspoonfuls cream tartar, 1 teaspoonful soda, 1 pint lightly sifted flour. Bake $\frac{3}{4}$ of an hour.

Serve with the following

Excellent Sauce.

1 tablespoonful flour, $\frac{1}{2}$ teaspoonful corn starch, cold water enough to make into thin paste, in a bowl, pour in bowl half full hot water, add half a cup of butter and cup of sugar, and set it in top of tea kettle and let it stand half an hour and stir occasionally, and flavor with wine and nutmeg.

The following will be found worthy of a trial:

Sponge Pudding.

3 eggs, the weight of the eggs in sugar, in butter, and in flour; beat the ingredients together lightly, having first warmed the butter. Bake about half an hour in cups.

Cream Pudding.

1 quart milk, 5 eggs, 4 tablespoons flour, 1 teaspoon salt.—Boil the milk, moisten the flour with cold milk, add to the hot milk and boil three minutes; add the eggs and boil up one half cup sugar. Flavor to the taste. Turn into a dish for the table, and just before sending to the table, strew half a cup of sugar over the top.

Cracker Fruit Pudding.

6 crackers pounded fine, 1 quart boiling milk, 1 spoonful flour, 1 cup brown sugar, 6 eggs, raisins and currants; all kinds of spice.—Bake. This is very nice.

Brown Batter Pudding.

1 cup molasses, 1 cup milk, 3 scant cups flour, 3 eggs, salt, $\frac{1}{4}$ teaspoon soda, spice and raisins to taste. Boil 3 hours. Sauce.

Lemon Rice Pudding.

Wash 4 small tablespoons of rice, and boil till softened; 1 quart of milk sweetened to taste, butter size of an egg; when nearly cooled, add the beaten yolks of 4 eggs and the grated rind of a lemon. To the beaten whites of the eggs add the juice of the lemon, and four spoonfuls of powdered sugar. Pour the batter into a dish, put the whites on top, and bake till brown. To be eaten cold.

Dandy Pudding.

1 quart milk boiled in water ; mix 2 spoonful corn starch with the yolks of 4 eggs and a half cup of sugar, and pour into the milk ; stir very quickly and take off at once. Beat the whites of the eggs well with half a cup sugar ; spread over the pudding when cool. Put in the oven and brown it. Flavor with essence lemon. To be eaten cold.

English Plum Pudding.

An eight cent loaf of baker's bread broken into $1\frac{1}{2}$ pints of sweet milk, and soaked all night ; $\frac{1}{2}$ pound butter or suet, $3\frac{1}{2}$ pounds brown sugar, 1 pound raisins, 1 pound currants. $\frac{1}{4}$ pound citron, nutmeg, 2 teaspoons salt, 5 eggs beaten light, $\frac{1}{4}$ pint of wine, $\frac{1}{4}$ pint of brandy. Boil steadily 9 hours. To be eaten with rich sauce.

Floating Island.

1 quart of milk ; stir in 6 yolks of eggs while the milk is hot ;— stir until it is cooked ; sweeten and spice to taste. Beat the whites of the eggs to a stiff froth and put them in a collander, pour boiling water over them to harden them, and then put them on top of the custard, with bits of jelly or not, as you choose.

Corn Meal Pudding.

Scald 7 spoonfuls of meal with 1 quart of boiling milk, 1 cup molasses, salt and ginger to taste. Bake.

Mrs. B.'s Foam Sauce.

1 cup sugar, $\frac{3}{4}$ cup of butter, 1 tablespoonful flour. Beat to a cream ; place it over the fire and stir in quickly 3 gills of boiling water.

Fig Pudding.

The following will be found a delicate and palatable dessert :

Half a pound of figs, $\frac{1}{2}$ pound of flour, 2 eggs, $\frac{1}{2}$ pound suet, a little sugar, and a little wine, salt and spice to taste. To be boiled in a tin shape for 4 hours.

If the above is not satisfactory, try the following as a substitute :

Bird's Nest Pudding.

Put into 3 pints boiling milk, 6 crackers pounded fine, and 1 cup of raisins. When cold add 4 eggs well beaten, a little sugar and 4 good sized apples pared and cored. To be baked and eaten with warm sauce.

Mrs. B.'s Lemon Pie.

1 cup hot water, 1 tablespoon corn starch, 1 cup white sugar, 1 tablespoon butter, juice and grated rind of 1 lemon. Cook for a few minutes, then add 1 egg. Bake with top and bottom crust. This makes one pie, and is nice.

Mrs. H.'s Boiled Batter Pudding.

1 cup milk, 1 cup flour, 1 egg. If a larger pudding is wanted, mix in the same proportion ; a little salt. Steam or boil. Sauce.

Sallie's Vinegar Sauce.

2 cups brown sugar, 2 cups water, 1 teaspoonful salt, butter size of an egg, half teaspoonful essence lemon, 2 spoonfuls vinegar, a little flour. Beat butter, sugar, lemon, and vinegar and flour well together. Pour the water boiling on them, and let it scald up.

Very Rich Sauce.

Half gill wine, half gill rosewater, half pound sugar, butter size of an egg, half nutmeg ; set in the top of the teakettle after beating all well together, and stir 12 minutes.

Cocoanut Pie.

1 quart of milk, 5 eggs, 1 grated cocoanut. Beat the eggs, and sugar to sweeten, together, and stir into the milk when hot, then add the cocoanut and spice to taste. Bake with a bottom crust twenty minutes.

White Sauce.

1 cup sugar and half cup butter beaten to a cream ; add half cup hot but not scalded milk ; beat an egg well, and put over the top.

Apple Custard.

Pare and core half a dozen very tart apples ; cook them in half teacup of water till they begin to soften. Put them in a pudding dish and sugar them. Beat 8 eggs with 4 spoonfuls of sugar ; add 3 pints milk, pour over the apples, and bake half an hour.

Nottingham Pudding.

1 pint sifted flour, 3 gills of milk, 1 gill rich cream, 6 apples, 4 eggs, a saltspoon of salt. Pare the apples, and take out the core without cutting them. Mix the batter very smooth, and pour over the apples. Bake one hour. Liquid sauce.

Eve's Pudding.

Half pound beef suet chopped, half teaspoon salt, half pound pared and chopped apples, half pound sugar, half pound flour, half pound stoned raisins dredged with flour, 5 eggs, 1 grated nutmeg. Sauce. Bake or steam 2 hours.

One pint stewed rhubarb or pie plant, 4 ounces sugar, half pint cream, 2 ounces pounded cracker, 3 eggs. Rub the stewed rhubarb through a sieve; beat the other ingredients well, and add.— Bake with a bottom crust only, half an hour.

Quaking Plum Pudding.

The following will be found a “toothsome” dish :

Take slices of light bread, spread thin with butter, and lay in a pudding dish layers of this bread and raisins till within an inch of the top. Add 5 eggs well beaten, and a quart of milk and pour over the pudding; salt and spice to taste. Bake 20 to 25 minutes, and serve with liquid sauce.

Before using the raisins, they should be boiled in a little water, and then poured in, water and all.

Baked Indian Pudding.

The following is one of the most useful puddings made—what the farmers call a good stand by :

Take 6 tablespoonfuls of meal, and stir molasses or syrup enough into it to have the meal all wet, and no more; that will sweeten it enough; then take 1 quart of milk and boil it; pour it boiling hot on the meal; stir the meal while pouring the milk on it, so as not to make it lumpy. Stir in 3 tablespoonfuls of wheat flour, wet with a little cold milk; salt and spice to the taste, and bake two hours.

If you want something a little richer and nicer than the above, try the following :

Wedding Cake Pudding.

Two-thirds of a cup of butter, 1 cup molasses, 2 cups of milk, 2 teaspoonfuls of saleratus, 4 eggs, 2 pounds raisins, stoned and chopped, 1 pound currants, $\frac{1}{4}$ pound citron.—Flour to make a batter, as thick as pound cake, salt and all sorts of spices. Boil or steam 5 hours. Serve with wine sauce.

Try the following relict of our forefathers. Do not be afraid it was concocted by any of the Salem witches.

Salem Pudding.

1 cup snet, chopped fine, 1 cup molasses, 1 cup milk, 1 teaspoon soda, $3\frac{1}{2}$ cups flour, 2 teaspoons cream tartar, 1 cup raisins, 1 teaspoon cloves, a little salt. Steam three hours. Sauce.

Custard.

Whenever you have occasion to make custard, be sure you have fresh eggs. Old eggs, even though sound are not as good as new ones. When you prepare eggs for custard, you should beat the whites separately and put them in last. Eggs should not be put in very hot milk. Custard should be boiled by setting the vessel in boiling water.

RICE CUSTARD.—Take a pint of milk and mix in it half a pint of cream, and an ounce of ground rice sifted, also two tablespoonfuls of rose water. Sweeten with loaf sugar and stir it well.—When it is nearly ready to boil, add the yolks of 3 eggs which have been previously well beaten. Add also a little cinnamon. Stir it and let it simmer about one minute.

BAKED CUSTARD.—Take 2 quarts of milk, 12 eggs, 12 ounces of sugar, 1 gill of rose water, 1 nutmeg and a little lemon peel.

BOILED CUSTARD.—Take 1 quart of milk, and boil in it $\frac{1}{2}$ a lemon peel and a little cinnamon; sweeten it with fine white sugar. Then strain it and when a little cooled, but before it is cold mix in 8 well beaten eggs and a few drops of rose water. Place the whole over a slow fire and stir till it is thick enough. A few coriander seeds may be put in before the milk is boiled.

GOLDEN BOILED CUSTARD.—Take the yolks of 10 eggs and mix them with rose water and sugar. Then add a pint of new milk. Let it simmer 2 minutes and stir while it is simmering.

CREAM CUSTARD.—Beat 10 eggs and put them into two quarts of good cream. Now add a little rose water, nutmeg and cinnamon, and sugar enough to make it as sweet as you want it.

COMMON CUSTARD.—Boil 1 pint of milk with a little cinnamon and lemon peel. Mix 1 tablespoonful of potato flour with two of cold milk. Then mix the whole together and strain through a sieve into a basin. Now gradually mix in the well beaten yolks of 4 eggs, and sweeten it to suit the taste. Place it over the fire, and stir a few minutes in order to thicken it.

Preserves.

Iron ware lined with porcelain is the best for making preserves in, because it is not like brass, subject to verdigris. When brass is used in the preparation of preserves, the acids will produce verdigris. For this reason, do not use any brass or other metal on which the acids will produce verdigris. Tin and porcelain are safe.

It should be generally known that boiling fruit in an uncovered kettle, and skimming it well is economical. Do this before the sugar is put in and then the skum you throw away is not sweetened. When sugar is high, you can hardly afford to sweeten the skum that rises from the fruit. If the sugar is good, very little skum will rise from it. Boiling the fruit uncovered, allows the evaporation of the watery particles, and when this is done the

preserves will be better flavored. It is not good economy to use too little sugar in preserving any kind of fruit. If you want your preserves to look clear and beautiful, use loaf sugar in making, but a good quality of clean brown sugar will make them taste full as well as nice looking sugar.

Preserves should be kept from the air. To exclude the air from the jars, cut some thick, white paper the proper size, and glaze it with the white of eggs. Then let it thoroughly dry, and tie it carefully over the jar. It will be better though, to paste it around the edge of the jar, as this will more thoroughly exclude the air, and is but little more trouble. All preserves should stand at least one night before being covered. Frequent exposures of preserves to the air will spoil them. This being the case it will be wise to select small jars.

CHEAP PRESERVES.—3 pounds of apples, and 3 pounds of pears well pared and cored. Then take 3 pounds of plums after they are pared and the stones removed. Cut them all into small pieces and add 4 pounds of loaf sugar. Boil three quarters of an hour. If more sugar is used, the preserves will be rather better, and they are passable when only three pounds are used. They will not keep as long as some other preserves.

Molasses.

If you have molasses in which there is an unpleasant taste, boil it and skim it before you use it. This often takes out the raw taste, and makes it more like sugar, but this is not always sure to remove all the unpleasant taste, though it seldom or never fails to make the molasses taste some better.

Good Yeast.

Good yeast is an indispensable article for making good bread. Many people cannot procure baker's yeast, and some do not like it. The following is highly recommended by those who have used it:

Boil half a dozen medium sized potatoes with a pint of hops, until done; then mash fine and add a pint and a half of flour, and scald with the hop water; and when sufficiently cool, add a pint of good lively yeast; set in a warm place to rise; when light, pour over it a pint of hop water; put it in a jug, cork tight, and set in a cool place, and my word for it, you will have as good yeast as is seldom found, with little expense.

Meat.

It is of some importance to know how to keep meat sweet in summer weather. Try this way :

Cover it lightly with bran and hang it in some airy place, as high as possible, and in a current of air if you can, but it must be all the time in the shade.

In this way meat may be kept sweet and good for a number of days even in very warm weather.

Many think that meat is better if kept a few days before it is used. If you are of this opinion, the above method will be of some use to you. In cold weather some make a practice of keeping beef and mutton a week or more before using. They think poultry is best if dressed and kept in a cool place a few days.

Stuffing.

To make stuffing, take dry pieces of bread or crackers and crumble it up fine. Put in some cream, sage, pepper and salt. Moisten some flour with milk, and add 1, 2 or 3 eggs according to the quantity of other ingredients you have got together.

Here is another way of making stuffing.

Take 4 ounces of fat pork, 2 ounces of crackers, 2 eggs, 1 cup of flour, 1 pint of milk, with sage, pepper and salt to suit. If this makes it too rich to suit you, increase the quantity of crackers.

To stuff a goose or duck, many call the following excellent.

Take 2 ounces of raw onions, and 1 ounce of green sage leaves. Chop them together very fine, then add 4 ounces of crackers, a little butter and 1 egg well beaten. Then pare 1 good sized apple and cut into very small pieces, and add it with just enough pepper and salt to suit. Some also put in a little cinnamon.

Cheese.

Every body knows that skim milk does not make as good cheese as milk that has not been skimmed ;

yet I have tasted of skim milk cheese that I thought was much better than none at all.

Heat fresh milk to about 90 degrees before you put the rennet in. It is usually calculated that three quarts of milk will make one pound of cheese, but sometimes it takes more and sometimes less. The rennet should soak at least 12 hours. The milk should be put into a large tub and part of it duly warmed, but if too hot the cheese will be tough. The proper amount of rennet should be put in and the tub covered. The best way of breaking the curd is to gather it carefully to one side of the tub with the hands. Probably the best way to salt the cheese is to put the salt in with the curd in the tub after the whey is out.

If mites get into the cheese, wash the shelves with strong soap suds, and rinse them with clear soft water. When the shelves are thoroughly dried, place the cheese back. It is well to do it even when there are no mites in the cheese. After cleaning the shelves in this way if there are mites in the cheese you will do well to take a small piece of woolen cloth, and after dipping it in sweet oil rub it well all over the cheese. Repeat this every day as long as necessary.

Coloring Cheese.

The *color* of cheese sometimes exerts a greater influence than flavor, in securing a ready sale. Most people reject a pale, light colored cheese, and choose those that have a golden color like rich cream, as this is a supposed characteristic of an excellent article. A light-colored cheese may possess all the richness of one that is as yellow as gold; indeed they may both be alike in quality; and still the golden colored one will be pronounced best, and command the highest price. So much does a good color enhance the value in most markets.

In order to secure the desired color, it is customary to employ annatto, but it may be done without. Let the curd remain in the vat, spread out as much as practicable, until it is of the right temperature to be put into the hoop. By allowing it to remain exposed to the atmosphere while it is cooling, instead of dashing cold whey or water on it—as is sometimes done—the rich creamy color may be secured without the use of any coloring matter. By this means, all the good flavor and richness will be retained ;—

whereas, when the curd is washed, more or less of the valuable portions of it are removed by the whey. If the curd be exposed to the air in this manner, the cheese will be of a uniform color throughout. Then if cured with care and the rind kept smooth by not allowing the outside to dry faster than the inside shrinks, a small quantity of annatto applied to the surface will impart a very good color to the exterior.

Walnut Catsup.

I give the following a place because it is something not generally known among housekeepers :

Beat 100 green walnuts in a marble mortar till they are completely broken, and then put them in a stone jar, with half a pound of eschalots cut in slices, one head of garlic, half a pound of salt, and two quarts of vinegar ; allow them to stand ten or twelve days, stirring them night and morning. Strain off the liquor and boil for half an hour, adding 2 ounces of anchovies, 2 of whole pepper, half an ounce of cloves, and a quarter of an ounce of mace ; skim it well, strain, and when perfectly cold, pour it gently from the sediment into small bottles. Secure from the air by sound corking, and store it in a dry place. The sediment is usually reserved for flavoring sauces.

Taking Medicine.

The habitual use of medicine should be discouraged. The habit of taking medicine every time one feels a little unwell is a very pernicious one, and often results in much sickness and suffering that would otherwise be avoided. The physical system of man is very delicately organized, and disordered action often comes from causes that seem trivial.—

The habit of continually introducing medicine into the system will tend to irritate certain organs, and thereby establish a condition of permanent disease.

The anatomical organization of all human beings are in some respects alike, but there are individual peculiarities which will modify the action of medicine, so that in different constitutions the same medicines produce different effects. The amount of medicine

required to produce a certain effect in one person, would hardly be felt in another. A dose of medicine that produces but little effect on one person may cause violent action in another.

There is a peculiarity of the human system to some extent applicable to all constitutions, and that is the power of adapting itself to circumstances. If we use medicine habitually, the system soon learns to adapt itself, in part at least, to its use, and in order to keep up the action or effect we must increase the dose. If we continue taking the medicine every day we must continue to increase the amount taken, and as we increase the amount we increase the diseased condition of the system.

Instead of taking much medicine I would recommend some simple treatment. If you find yourself unwell, decrease the amount of food taken into the stomach, bathe frequently and sleep more than usual, if you can quiet yourself to do so without taking medicine to cause sleep. There is no doubt but that taking too much medicine causes nearly or quite as much sickness as it cures. If you have any occasion to call a physician, I advise you to call one who has the reputation of curing his patients with little or no medicine. If your physician can cure you without medicine, you can better afford to pay him ten dollars than you can to pay him five if he makes you swallow many doses of poison stuff which he

will call medicine. Never employ a physician who gives such medicines if you can find one who gives little or none.

Eating and Drinking.

In addition to what I have already said about eating and drinking, I would add the following:

Never eat or drink anything unless it tastes good. If by chance you take any victuals into your mouth that tastes bad, do not swallow it but spit it out. If there is any bad taste about your common food or drink, it is sufficient proof that it is not needed. If you find that even the most wholesome food does not taste good, then I advise you to eat nothing for some time. Indeed eat nothing till you are hungry enough so that your food can be eaten with a relish, and drink nothing till water tastes good. This is always a safe rule to go by. The great trouble is, we are likely to eat and drink too fast. Let nothing induce you to swallow your dinner or anything else in a hurry. Do not plead that business demands that you shall eat fast—good health demands that you shall eat slowly. If you find by actual experience, that any particular kind of food injures you, do not eat so much of it. Many say they are very fond of a certain article of food but it injures them, when the real fact in the case is, that the injury arises from eating it too fast, or eating too much of

it. Should you find that some particular article of food that you like, does not agree with you, it may be well to enquire into the matter a little, before entirely rejecting it. A close and careful investigation of the case, may reveal the fact that the food is really wholesome, only you have been in a habit of eating too much of it, or eating it too fast. If such should prove to be the case, then be a little more careful, and eat more as you should eat.

If you feel stupid, and indisposed to exertion after eating, the probability is that you have eaten more than you needed, and eaten it too fast. If you will adopt the practice of eating very slowly you will not be as likely to overload your stomach.

Foul Air in the Sick Room.

Even when especial pains are taken to keep a sick-room well ventilated, there will be an unpleasant odor there. This disagreeable odor may be removed by scorching a few grains of coffee in the room. Usually simple scorching will be enough, but sometimes it will be best to let the coffee burn. This does not, however, wholly remove the unpleasant odor of tobacco.

Stuttering.

It is said that Demosthenes stuttered, but overcame the difficulty by persevering efforts. He used to get away by himself and put something in his

mouth and then speak and read as distinctly as possible. The extra care required to speak plainly with a few pebbles in his mouth at length enabled him to entirely overcome the difficulty. One good practice to enable those who stammer to overcome the difficulty, is the following:

Take a little piece of hard wood, just large enough to hold between the teeth and hold them from a quarter to half an inch apart. Let the stick be long enough to reach into the mouth about an inch; hold it firmly between the teeth and read or speak slowly for a few minutes at a time. Do this several times a day, and continue the practice for some length of time. Read or speak deliberately and with varying degrees of force. Sometimes speak in a loud, full voice, and again almost or quite in a whisper.

I once knew a man who cured himself by this practice. Reading in concert will also be of use.— It will be of advantage to hold something in the mouth or between the teeth part of the time during this exercise. Do not confine yourself to one thing but practice the different methods at different times. With care you will undoubtedly be able to overcome this embarrassing difficulty. The same practice that will cure stammering will often overcome other defects in articulation. The following is quite highly recommended for correcting defects in articulation:

Take a few lessons in elocution. Carefully learn the nature and character of the elementary sounds. Learn how to make each elementary sound separately without naming the letter that represents it. Frequently utter these sounds, and spell words by uttering the elementary sounds instead of repeating the letters.— Frequently repeat with varying degrees of force sentences that are rather difficult to utter.

In part first of Graham's Hand Book of Standard Phonography, you will find much valuable information on this subject. A careful study of the "Spe-

cific Directions for Making the Elementary Sounds" will be of great use to every one who has any defect in articulation. Under the head of "Elements of the English Language," he gives a large selection of such sentences as this:

"Three chubby children in Richfield were each choked with choice chunks of cheese, much of which was purchased of Charles Chickering on Chimborazo."

Accompanying these sentences are explanations and information that cannot fail to be useful to any one who stammers or has any defect in articulation.

Here is another help which may be used in connection with the methods already given.

Get a friend to go with you into a room where no one will disturb you, and have him repeat sentences similar to the one above given. Then as soon as he is through speaking repeat the sentence after him. While your friend is thus assisting you, you should attend closely to what he says, and he should make it a point to repeat many long and difficult words with varying degrees of force. You should repeat the word as nearly as possible in the same emphasis. I have thus assisted many to overcome their stammering.

Cheap Vinegar.

Simple as the following recipe is, I have known it to be sold for five dollars. I am told that it is good as well as cheap, and better than the average of vinegar usually sold.

Take 8 gallons of clear, soft water, and add 1 gallon of common molasses. Put this into a cask large enough so that it will be only about two-thirds full. Roll the cask around so as to mix the molasses and water. Then add three spoonfuls of good yeast.—Roll the cask again for a few minutes, and if it is in warm summer weather, set it out doors on the sunny side of the house, but if the weather is cold the cask must be kept in a warm room. In two weeks take a large sheet of brown paper and tear it into small pieces, and put into one pint of molasses and let it soak over night. Then add this to the contents of the cask and again roll the cask as before. Then set it away to be used at any time you want good vinegar.

Beeswax.

As some of my readers may wish to know how to prepare beeswax from the comb, I offer the following:

Put the comb in a strong muslin bag. Place the bag in a sauce pan with enough water to keep it from burning. Then place over the fire and let the water gently boil. While boiling, press the bag to extract its contents. Skim off the wax and drop it into cold water. It will remain on the surface. When well cooled, gather it up, and after putting it in a sauce pan place it over a slow fire and let it melt. Then pour off the clear wax into suitable vessels and let it cool. This will refine it sufficiently.

Powder of Milk.

Take 1 quart of new milk, and half a pint of soft water. This should be placed over a slow fire and gently heated. Keep stirring it all the time. When it is about half evaporated, add gradually one pound of white sugar, but be sure and stir it briskly all the time. When sufficiently boiled down, remove from the fire and pour into plates. Then thoroughly dry in an oven, but be careful and not let it burn. When it is thoroughly dried, powder it finely and keep it in well corked bottles.

Those who have used the above declare it makes an excellent substitute for milk. A little of it added to water forms an agreeable drink. Many use it to season their tea and coffee. It is very convenient to carry in the pocket when you are going on a journey as you can at any time stir a little of it into the water you are to drink.

Substitute for Eggs.

Corn starch is said to be an excellent substitute for eggs, one large spoonful being reckoned as equal to one egg. When eggs bring a high price, it is much cheaper to use this substitute. Some who have plenty of eggs sell them and use the substitute instead. If this was generally known, eggs might not

always stand as good a chance to bring fabulous prices.

To Protect Dried Fruit from Worms.

Mix a little sassafras bark with dried fruit when you put it away, and it will prevent it from being destroyed by insects.— Besides preventing worms from troubling the fruit, it adds a pleasant flavor.

It is said that fruit may be kept in this way for years. The sassafras bark should be well dried and broken up into small pieces; or, if you think best, it may be powdered and mixed in with the fruit.

Indelible Pencil Writing.

Valuable letters and other important writings are sometimes written with a pencil. Should you ever have any such writing, you can make it nearly indelible as follows:

Lay the paper containing the writing in a shallow dish and pour skimmed milk upon it, but do not let it remain there long. If any spots are not sufficiently wet with the milk, take a feather and place a little of the milk lightly on the dry spots. Do this carefully, and wet the writing all over. Then take up the paper, and let the milk drain off. The drops that collect on the lower edge of the paper should be carefully wiped off with a feather.— Then dry the paper perfectly, and the writing will be nearly as indelible as though written with good ink.

This is sometimes of importance to artists who have pencil drawings which they wish to keep.

Water Proof Cloth.

Common cotton cloth can be rendered water-proof with but little expense, and not enough trouble to amount to anything. Here is the recipe:

Dissolve 4 ounces of alum and 2 ounces of sugar of lead, each separately in a quart of water each. Mix them together thoroughly and let the mixture stand for two or three hours. The sediment will settle. Then pour off the clear liquor into a clean dish and immerse the cloth, leaving it in till thoroughly saturated, after which you will dry the cloth in a warm room. Immerse the cloth three times and thoroughly dry after each.—

When it has been thoroughly dried the last time, take some white chalk and rub it well all over both sides of the cloth. This will render cotton, silk, or linen water-proof.

I first bought the above recipe from a man in Dubuque, Iowa. I tried it and found it worked well. I then tried it without the chalk, and found it would do just as well. Next time I tried it without the sugar of lead and found it still almost as good as before. I would now say to render cloth water-proof,

Make a strong solution of alum water; dip the cloth in it three times and thoroughly dry after each immersion. It should always be dried in a warm room. Hot water must be used in dissolving the alum.

In this way you can render a good pocket handkerchief water-proof and tie up a pint of water in it and carry it in your pocket.

Catarrh.

I have never yet seen any one much troubled with catarrh who had not some other complaint or complaints.

To cure catarrh attend to the general health, and do not eat much meat. Do not eat meat more than twice a week. Do not eat much sweet food or use sweet drinks. But persons troubled with this disease may eat an egg or two every day. Do not allow them to be boiled very hard, or fried in hog's grease. Bathe often and be sure to wash the head thoroughly every morning.

I was once severely troubled with the catarrh and tried many remedies. The best local application is this:

Lean forward and let some one commence pouring cold water on the back of the neck. When about one pint has been poured on, let the pouring cease for a minute. Then turn your head a little to one side and let about a pint be poured on the side of the neck and face, but most of it should fall behind and just below the ear. Then stop a minute and pour the same on the other side. Again stop a minute and then pour on the side you poured on first, and after waiting a minute pour on the other side again. So much being done you will take a towel and wipe off all the

water from the neck and face, and let some one rub the back of the neck and sides of the face with their warm dry hands. Repeat this every morning for a week or ten days. Then omit for a few days and commence again. The amount of water poured on is not particular, but do not pour on very great deal nor pour very fast. About a pint each time pouring will be about right—that is, about a pint on the back of the neck, then a pint on the side of the neck, etc. You must use your own judgment, in part at least, as to the quantity, perhaps you can bear a little more. The water may be best poured from a pitcher, and should fall from one to three feet in distance. Follow up this treatment as long as may be necessary, but do not fail to attend to the general health.

Acute Catarrh.

The following treatment will remove this affection in nine cases out of ten.

Bathe the head and face in water as hot as you can bear it frequently during the day, and move the bowels by a brisk cathartic.

How to Treat a Wound.

Sponge with cold water till the bleeding ceases, then wipe dry and draw the lips together with adhesive plaster, and if large put in two or three stitches as may be necessary to hold them firmly together, and leave the rest to nature. Never interpose anything solid or fluid between the lips of a flesh wound. In case of extensive wounds it may be necessary to apply a bandage to support the parts.

Fainting from Loss of Blood.

Place the patient in a horizontal position, with the head the lowest.

Wounds of Large Vessels.

Take a pocket handkerchief and tie around the limb above the wound, put a stick underneath it and twist it until the bleeding is stopped, then send for a surgeon. If it be an artery, the blood will be bright scarlet in color; and if a vein it will be dark. If an artery the blood will come out in jets; and if a vein the stream will be continuous.

To remove Corns.

Soak the feet in weak ley until the corn becomes soft. Then take a strong saddler's needle and commence raising the hardened skin at the outside, gradually approaching the center until the whole hardened mass is removed. It causes no pain, and when skillfully done the troublesome customer is done for.

Here is another :

Take a lemon, cut a piece of it off, then nick it so as to let in the toe with the corn, the pulp next the corn, and tie it on at night so that it cannot move. The next morning the corn will come away to a great extent. Two or three applications will be sufficient for the most inveterate customer.

Still another cure for the corn pest :

Apply a piece of linen saturated with olive oil, to the corns night and morning, and let it remain on during the day, it will be found to prove a slow but certain cure; they will wear out of the toe, and some of the corns may be picked out after the oil has been used for a time, but care should be taken not to irritate the toe.

If you are troubled with rheumatism and fail to find relief, try the following :

Liniment for Rheumatism.

1 pint alcohol, 2 ounces camphor gum, $\frac{1}{2}$ ounce oil of amber, 1 ounce castile soap, $\frac{1}{2}$ ounce oil hemlock, $\frac{1}{2}$ ounce oil wormwood. Cork tight in a bottle and shake. Bathe the parts before hot fire.

Rheumatic Liquid.

Alcohol 1 quart, oil of wormwood 1 ounce, pulverized capsicum 1 ounce, camphor gum 1 ounce, and 1 ounce of oil of origanum. Put all into a glass bottle. Keep it well corked, and shake it up once or twice a day for a week. Apply to the part affected, and rub it in for at least fifteen minutes each time. The best way is to rub part of the time with the hand and part of the time with a piece of flannel.

Hick's Ointment.

The following when carefully and correctly prepared will be found to be a most excellent application for indolent and varicose ulcers, old sores, sore lips, &c.

Take of golden litharge $\frac{1}{4}$ of a pound, olive oil 1 pint, strong vinegar 1 pint. Mix in an iron kettle, and put over a slow fire for 3 hours, constantly stirring it. Do not allow it to boil or when it is cold it will be too hard to use.

A Simple Painkiller.

Dr. Hall says neuralgia of the severest character is sometimes removed by painting the parts two or

three times a day with a mixture composed of half an ounce of the tincture of iodine and half an ounce of the sulphate of morphine.

If the above fails, as it may sometimes, try the following, which long experience has proved to be one of the most powerful liniments for the relief of severe pain :

Telegraph Painkiller.

Take equal quantities of spirits of hartshorn, sweet oil and chloroform; dip into this a piece of cotton cloth doubled, about the size of a silver dollar, lay it on the spot, hold a handkerchief over the spot, so as to confine the fumes and the pain immediately disappears. Do not let it remain on over a minute. Shake well just before using, and keep the bottle very closely stoppered.

Magic Tooth-Ache Drops.

Mix together equal parts of laudanum, tincture of myrrh, spirits of camphor, and oil of cloves. Apply to the affected tooth with a little lint.

These drops will always give relief, and in most cases entirely cure.

To Fasten Loose Teeth.

The following will be found an excellent preparation to strengthen the gums and fasten loose teeth.

Take 1 ounce of myrrh in fine powder, 2 spoonfuls of the best white honey, and a little green sage in fine powder; mix all well together, and rub the teeth and gums with it every night and morning.

Celebrated Mustang Liniment.

Fortunes have been made out of the following recipe, both by selling the formula and by the manufacture and sale of the medicine. It is a really good thing and worth all it ever cost. Veterinary surgeons would hardly think of prosecuting their pro-

mission without it. We are glad to give the patrons
this book so valuable a recipe.

Camphor gum 1 ounce, alcohol 1 pint, oil spike 1 ounce, oil or-
num 1 ounce, olive oil 1 pint, spirits turpentine 1 ounce, spir-
it hartshorn 1 pint, oil peppermint $\frac{1}{2}$ ounce. Mix and shake
well before using.

For Burns.

Apply kerosene oil to a burn and it will take out the fire, and
prevent blistering if applied immediately. If the burn is bad,
use cotton wool saturated with the oil on it, until it is done
healing.

The above is a remedy that is always at hand in
every family,

FOR SCALDS OR BURNS.—Apply carded cotton and oil immedi-
ately, excluding the air as perfectly as possible.

FOR DEEP SCALDS OR BURNS.—Saturated lime water and olive
oil, equal parts. Apply with a feather.

Here is another application for scalds or burns.

Mix thoroughly together equal parts of the white of eggs and
seed or sweet oil, apply to the affected parts linen cloths satu-
rated with this mixture, and change them as often as they be-
come hot or uncomfortable. If linseed or sweet oil is not at hand
use molasses instead, until oil can be obtained. This application
is only to be used in scalds and burns where the skin is off. In
cases where the skin is not removed, cloths wet every five
minutes in a mixture of two parts cold water and one part com-
mon spirits, and applied, will be of more service—continue these
applications till the burning and inflammation is removed, then
a ointment made of equal parts of beeswax, fresh butter, and
rosin melted together, will soon heal the sores and remove the
scars. Burns and scalds must always be kept excluded as much
as possible from the light and air, as this increases the irritation
and prevents their rapid healing.

Sure Remedy for Diarrhoea.

Among the many prescriptions for the cure of di-
arrhoea, bowel complaint, or any looseness of the
bowels, the following is the safest and surest, and
may everywhere be found:

Take, say half a pound of the small roots of the wild blackberry
root, with the bark only of the larger ones; wash clean; put in a
glazed ware dish, with a quart of water. Steep and boil

until there is a pint of fluid left. Strain this off into a bottle and it is ready for use. It will keep any length of time by adding a gill or so of alcohol, or of strong brandy or whiskey to prevent fermentation. A tablespoonful three times a day is a dose for a grown person.

Even the army diarrhoea which is "chronic" from its commencement yields to this remedy, with proper precautions as to food. The root may be dug at any time during the season and preserved dry.

An astringent medicine is not to be taken in all cases of looseness of the bowels. If the discharges are dark-colored, and of an offensive character, they show a bilious and morbid condition of the bowels and stomach, which require to be thoroughly cleansed with some mild cathartic before any attempt is made to check them, when, as a general thing, the bowels will regulate themselves without any further treatment. If however, watery discharges continue after the bilious matter has passed off then some astringent is necessary. The following is a powerful astringent and tonic and the worst cases of diarrhoea, summer complaint, and cholera morbus, or even cholera itself will yield to its efficacy ;

Diarrhoea and Cholera Syrup.

Take 3 ounces blackberry root, 1 ounce golden seal, 1 ounce stomach (leaves and berries), 1 ounce valerian, 1 ounce capsicum, 1 ounce allspice, 1 ounce ginger root. Put all (in a crude state) together, and steep in 6 quarts of water, till evaporated to two; then add 2 quarts of good brandy, 2 ounces extract dandelion, enough red pepper to make it tolerably hot, and 6 to 8 ounces loaf sugar. Dose, for an adult, from 1 to 2 tablespoonfuls in a little warm water, as often as the severity of the case may make necessary.

If all the above ingredients cannot be procured,

will not destroy the property of the medicine if some of them are left out.

For Dysentery.

Dysentery is a disease of the lower bowel, caused by morbid irritation and inflammation, producing hemorrhage and intense pain and bearing down; in which case astringents, especially those of a hot and irritating nature, are not to be taken, as they only serve to keep up the inflammation and enhance the difficulty, but soothing emollients in the form of clysters must be given in their stead.

For this purpose dissolve 1 teaspoonful of the pulverized leaves of lobelia in 1 pint of warm slippery elm water, and inject into the bowels about 1 tumblerful at a time. If the bloody discharges and pain continue, apply warm fomentations to the bowels, and give freely of warm ginger tea. Starch water with a little Laudanum in it will be good, if the above ingredients cannot be readily obtained.

Another Diarrhœa Remedy.

The following remedy for bowel complaints has been in use in our family for several years, and always with the happiest results:

Pulverized rhubarb 1 ounce, peppermint leaf 1 ounce, capsicum $\frac{1}{8}$ ounce. Cover with boiling water and steep thoroughly, strain and add essence of cinnamon and bi-chloride of potash, each $\frac{1}{4}$ ounce, and 4 ounces of loaf sugar. Add good brandy equal in amount to the whole. Dose—1 to 2 tablespoonfuls for an adult, to 2 teaspoonfuls for a child; 3 to 6 times a day according to the violence of the attack, until relief is obtained.

Another remedy for diarrhoea or bloody flux:

Diarrhœa Tincture.

Compound tincture of myrrh 4 ounces, tincture of rhubarb and spirits of lavender each 5 ounces, tincture of opium 3 ounces, oils of anise and cinnamon with gum camphor and tartaric acid each $\frac{1}{8}$ of an ounce. Mix thoroughly. Dose—1 teaspoonful in $\frac{1}{2}$ a cup of warm water sweetened with loaf sugar. Repeat the dose after each passage.

We do not propose to furnish a work that shall take the place of a physician, or one that shall preclude the necessity or duty of sending for one as soon as the necessity occurs, but these remedies which will be found in almost every household will sometimes save life, by being administered at once in the absence of the doctor. The following recipe for the cure of diphtheria, one of the worst forms of disease with which people are afflicted, was prepared and furnished by a prominent New York physician, who says of 1000 patients treated with it not one was lost.

Cure for Diphtheria.

Take table salt 2 drachms, black pepper, golden seal, nitrate of potash and alum 1 drachm each. Mix and pulverize, put into a teacup, which half fill with boiling water, stir well and fill up the cup with vinegar. With this wash swab the back of the mouth and throat thoroughly, every half hour, one two and four hours as recovery progresses. Let the patient swallow a little each time. Apply 1 ounce each of spirits of turpentine, sweet oil and aqua ammonia, mixed, to the whole throat and to the breast bone, every 4 hours. Keep flannel on the parts.

Another Cure for Hydrophobia.

A celebrated Syrian Missionary, Rev. R. P. Le-grand, has given the following as a certain cure for this most terrible disease. He says that in Syria, where hydrophobia is quite common, he has used it in 60 cases and performed 60 cures.

Take 3 handfuls of the leaves of *datura stramonium*, boil them in a quart of water till it is reduced to a pint, and make the patient drink the whole as soon as possible after the bite.

A violent madness will ensue, but this will be of short duration. A profuse perspiration follows and in 24 hours the patient is cured. Cauterization

should also be resorted to as soon as possible, though many cures have been effected where this has not been done.

To Cure a Fellon.

A sure cure for this most painful and troublesome affliction would be worth its weight in gold. The following has been handed us by an old physician who says he has known it to cure in a score of cases, and he thinks it will not fail if applied in season :

As soon as the parts begin to swell, get the tincture of lobelia, and wrap the part affected with a cloth saturated with the tincture, and the fellon will soon be dead.

The pain and suffering caused by these tormentors will be an excuse for giving several cures.

ANOTHER CURE.—Apply a salve of marrow taken from the back bone of a bullock, so that the part affected shall be completely covered. Repeat if necessary, but usually the effect is so speedy as to remove the pain and restore the parts to a healthy condition in less than an hour.

Bilious Cholic.

This is a dangerous and most painful disease and requires prompt treatment. The following is given as a sure cure :

Place the patient's feet in warm water as soon as possible after being taken. Apply stimulating liniment to the surface. If no liniment is at hand, in its stead apply flannel cloths wrung out of hot water, or where some sweating herb has been boiled, and give the patient one tablespoonful of sweet oil once in ten minutes until relief is found. It seldom requires more than the third dose.

To Stop the Flow of Blood.

Housekeepers, mechanics, or others in handling tools, knives and other sharp implements, very frequently receive severe cuts, from which blood flows

profusely, and oftentimes endangers life itself. Blood may be made to cease flowing as follows:

Take the fine dust of tea and bind it close to the wound—at all times accessible and easily obtained. After the blood has ceased to flow, landanum may be advantageously applied to the wound. Due regard to these instructions would save agitation of mind, and running for the surgeon, who would probably make no better prescription if he were present.

Hive Syrup.

The following is the formula for the celebrated Hive Syrup, that has been so long sold as a remedy for croup in children, and coughs and colds in older persons.

Seneca snake root $\frac{1}{2}$ pound, Virginia snake root $\frac{1}{2}$ pound, squills 3 ounces, water 3 pints. Mix and simmer to 2 pints;—strain and add sugar (white or loaf) 2 pounds. Dose—for an adult a teaspoonful; for children 15 to 30 drops according to age.

For spasmodic croup in children it has no equal. Given in teaspoonful doses, it acts promptly as an emetic, thus relieving it immediately.

Earache.

Many children are frequently troubled with earache, and a sure remedy would be a great relief to children and parents too. Hot tobacco smoke used to be considered as good a remedy as could be got, but the application is inconvenient. The following will be found a much more convenient remedy, and is said to be reliable.

Take 1 teaspoonful each of the juice of grated onion and blood beet; mix and drop several drops in the ear warm, and use it often. If the pain is very great, moisten wool or cotton with the same, and put it in the ear every ten minutes. Seldom fails to give instant relief.

Green Salve.

The following will be found an excellent salve for old sores, inflammation, etc.

Take 1 pound of rosin, 3 ounces of beeswax, 3 ounces of mutton tallow, and $\frac{1}{8}$ of an ounce of verdigris. Melt the rosin, wax and tallow together, and when cool add the verdigris finely pulverized.

Sticking Salve.

3 pounds rosin, half a pound mutton tallow, half a pound beeswax, and a tablespoonful of sulphur, melted, poured into cold water, and worked and pulled an hour.

The following recipes will frequently come in play on the farm or in the stock-yard:

Mash For Horses.

This was furnished by a celebrated steeple chaser.

Take a feed of oats, a double handful of linseed for each horse, and boil for three hours; then turn into a large tub or earthenware pan and add as much bran, with just enough warm water to moisten the whole thoroughly, put a cloth over it and let it stand an hour; then mix it well, and feed as soon as it is cool enough.

This mash is very useful when horses in hard condition "dry up" and grow thin in spite of continual feeds of corn. Some give it once a week all the year round, but oftener, if required by any particular horse. A few beans may be boiled with the corn, if the horse is in a very low condition.

Cure for Scratches.

Apply kerosene oil once a day for a few times. The remedy is said to be a good one and will effect a cure in most cases. It is easily tried.

Here is another

Cure for Scratches.

Mix white lead and linseed oil in such proportions as will render the application convenient. Two or three applications will generally effect a permanent cure.

Cholic in Horses.

A correspondent of the New York Farmers' Club prescribes the following for cholic in horses :

Put the patient where he can lie down and keep as easy as possible. Saturate a blanket in boiling hot water and throw over the horse along the back and sides. Sprinkle salt on the back forward of the hips. When the blanket cools renew the application till relieved. The horse will stand 140 degrees of heat.

For Baulky Horses.

Take the following mixture and rub the nose of your horse to make him draw, and act obedient to your command :

Oil of annis, oil of cummin and oil of rhodium, equal parts and mix with alcohol to cut it.

Horse Stables.

In this connection we cannot do better than quote the following remarks in reference to two evils in the construction of stables :

The first is in having the doors and upper floor so low as they generally are. On account of these low doors horses instinctively learn to fear them. They are also among the most frequent causes of poll-evil. The horse, when passing through them, is either surprised by something it beholds outside the building, or checked by the voice or gesture of the person leading him, when up goes the head, and crash comes the poll against the beam of the doorway. A violent bruise often results therefrom, and a deep-seated abscess follows. Low hay floors also produce the same trouble. The sudden elevation of the head is, in the horse, expressive of every unexpected emotion. The effect is always noticed whenever you enter the stable rapidly, or at an unusual hour. A sudden noise will also cause the same upward motion of the head.—With low stables an injury to the horse is almost inevitably sure to follow.

Again, the easiest position in which the horse can stand, is when the hind feet are a very little the highest portion of the body, or when the flooring of the stall slants in exactly the opposite direction to what it does in most stables. This is the other error in constructing stables to which we alluded. Horses at liberty in a pasture, invariably stand when at ease, with their hind feet elevated somewhat, and it is almost a wonder that builders of stables have not improved upon this fact before, and adapted floors to the wants of the horse. The moisture from the horse, if the floor slanted toward the forward feet, would help to keep the

forward feet moist, cool and healthy, whereas they are now generally hot, full of fever, and require washing with cool soap suds, at least once a day, in order to be kept in a healthy condition.— This is not all. Where the floor slants back, the horse not unfrequently attempts to ease the heavy strain upon the flexor tendons of the hind legs by hanging back upon the halter. The pressure upon the seat of the poll stops natural circulation, and in time it develops itself into a deep-seated abscess. We should like to see the stable in which the two errors in building we have just pointed out did not occur.

To Prevent Flies from Teasing Horses.

Take 2 or 3 small handfuls of walnut leaves, on which pour 2 or 3 quarts of cold water. Let it infuse one night, and pour the whole next morning in a kettle and boil for $\frac{1}{4}$ of an hour. When cold it is fit for use. Moisten a sponge with it, and before the horse goes out of the stable let those parts which are most irritable and exposed, be smeared over with the liquor. Pennyroyal prepared in the same way, is equally good. Flies will not alight a moment on the spot to which this has been applied.

Ring Bone and Spavin.

The following has been a secret with veterinarians, but we are not aware that we are infringing on any one's possessory right by giving it place in this book. It has cured some pretty hard cases to the personal knowledge of the writer :

Venice turpentine and spanish flies each 2 ounces, aqua ammonia and euphorbia each 1 ounce, red precipitate $\frac{1}{2}$ ounce, corrosive sublimate $\frac{1}{2}$ ounce, lard $1\frac{1}{2}$ ounces. Pulverize all and put into the lard; simmer slowly over coals, and pour off without sediment.

For ringbone cut off the hair and rub the ointment well into the lumps once in 48 hours. For spavins once in 24 hours. Three to four applications will frequently effect a cure. Wash well after each application with soap suds rubbing over the place with a smooth stick to squeeze out a thick yellow matter.

Bone Spavin.

Take the following recipe and form a paste with which thoroughly rub the affected part after having cut the hair off close.— Before the application grease around the spot that the medicine may not act where it is not wanted.

Take corrosive sublimate, quicksilver and iodine, of each one ounce; rub the iodine and quicksilver together, then add the sublimate. Then add sufficient lard to make a paste.

Norwegian Cure for Bone Spavin.

Dog's grease, $\frac{1}{2}$ pint, best oil oirganum, $\frac{1}{2}$ ounce. Mix thoroughly and it is ready for use.

Apply each morning for three mornings, heating it in with a hot iron each time; then skip three mornings and apply again as before, until you have made nine applications, after which wait ten days and if a cure is not then effected, go over again the same way.

Here is another spavin cure:

Take oil of spike, oil origanum, oil of cedar, british oil, and spirits of turpentine, each 1 ounce; spanish flies pulverized, 1 oz.

Apply once in six to nine days. It will also scatter poll evil if applied before breaking out.

Poll Evil Remedy.

Cover the head and head neck with two or three blankets; have a pan or kettle of the best cider vinegar, holding it under the blankets: then steam the parts by putting hot stones in the vinegar, until the horse sweats freely. Repeat three mornings, then skip three mornings until a cure is effected.

Another Remedy.

The following is said to be a certain remedy:

Potash $\frac{1}{4}$ ounce, ext. belladonna, $\frac{1}{2}$ dram, gum arabic $\frac{1}{4}$ ounce. Dissolve the gum in as little water as possible, then having pulverized the potash, mix the gum water with it and it will soon dissolve; then mix in the extract and it is ready for use.

Take a small syringe and inject into the pipes, after thoroughly cleansing the sore with soap suds, made of castile soap. Repeat once in two days, until a cure is effected,

Still Another.

Poll evil may be scattered if taken before breaking out with the following preparation :

Take mandrake root, mash and boil it ; strain and boil down until rather thick, then form a salve by simmering with enough lard for that purpose.

Anoint the swelling once a day until it disappears.

For Bots.

The following is said to be a sure cure for the bots in horses. It is the old cure that has long been used by farriers and horse doctors :

Take new milk 2 quarts, molasses 1 quart, and give the whole amount. 15 minutes after, give 2 quarts of warm sage tea. Half an hour after the last, give 3 pints of tanners oil, or lard. If that does not physic, give another dose.

Some of the most reliable symptoms of the presence of bots are the frequent nipping of the horse at his own sides, and by red pimples or projections on the inner surface of the upper lip, which may be plainly seen by raising the lip up.

Sloan's Horse Ointment.

The following is the formula for the popular and excellent remedy known as Sloan's Horse Ointment, for flesh bruises, broken knees, galled backs, cracked heels, &c. It is also effectual for burns or scalds in human flesh :

Take 4 ounces rosin, 4 ounces beeswax, 8 ounces lard, and 2 ounces honey. Melt these together slowly, gradually bringing to a boil. As it begins to boil remove from the fire and slowly stir in about a pint of spirits of turpentine—then stir until cold.

Condition Powders.

The following is an efficient medicine in all cases of coughs, colds, distemper, hide bound, and other

diseases where condition powders are generally given.

Take fenugreek, cream of tartar, gentian, sulphur, saltpetre, rosin, black antimony and ginger, 1 ounce each, cayenne $\frac{1}{2}$ ounce. Pulverize all finely and mix thoroughly. Dose—In ordinary cases give 2 teaspoonfuls once a day in feed. You may give it twice a day in extreme cases.

If you have a worn down and apparently broken down horse, that you are disposed to turn out on the common as a “goner,” try the following :

CONDITION POWDER No. 2.—Take gamboge, alum, saltpetre, rosin, copperas, ginger, aloes, gum myrrh, salts and salt, 1 ounce each. Dose—1 tablespoonful in bran only, twice a day for a few days, then once a day with oats and richer food. The effect will be magical.

Heaves in Horses.

We have frequently heard old farmers say that there was no permanent cure for the heaves. They are greatly relieved by stinting the horse of his supply of water and letting him go thirsty for some time, only wetting his food. A ball made after the following formula will relieve if not entirely cure the worst case of heaves :

Take 4 ounces each of balsam of copaiba and balsam of fir, add calcined magnesia sufficiently thick to make into balls. Give a middling sized ball night and morning for a week.

Here is another remedy highly recommended :

Take equal parts of lobelia, wild turnip, elecampane and skunk cabbage. Put 4 ounces of the mixture into 2 quarts of alcohol, and make a tincture. Let stand a week, then put 2 tablespoonfuls into their feed once a day for a month.

Founder in Horses.

The following remedy has been applied successfully in several cases of founder :

After drawing 1 gallon of blood from the neck, drench the horse with 1 quart of linseed oil ; then rub the fore legs thoroughly with water as hot as you can bear your hand in.

The following will be found an effectual
Physic for Horses.

Take 5 drams Barbadoes aloes, 1 dram tartrate of potassium, 2 drams each of ginger and castile soap, 20 drops oil of anise.— Mix and make into a ball with gum solution. Feed the horse a day or two on scalded bran instead of oats, and then give the ball, giving warm drink during the operation. If it does not operate in a couple of days, give another ball half the size.

To Relieve Cattle When Choked.

Take half a pint of soft soap, 1 quart of sweet milk, mix them together, and then let the strongest man who is at hand, place his hip firmly against the creature's shoulder; then put both hands over the head, between the horns. Now take hold of both sides of the upper lip, with a good grip, and raise to any desired point; then with a bottle or horn pour half the mixture down the animal's throat, a little at a time, then drive the animal around, and if not relieved in a few minutes, give the remainder.

The above remedy has never been known to fail, and it is excellent for the bloat. It is certainly much easier, and more humane than to run a stick down the animal's throat with chances about even, to kill or cure.

Hollow Horn.

An old dairyman who has used the following remedy for the cure of the hollow horn or horn ail in cattle for many years, says there are few cases that it will not reach and cure.

Dissolve a tablespoonful of copperas in warm water, and mix it with the creature's mess, if it is not past eating; if it should be, pour it down. This dose will seldom need to be given more than once.

Scours in Calves.

A safe, sure and convenient remedy for scours in calves is a fresh raw egg.

Take the calf, hold up its head, and hold down its tongue and break the egg in its mouth. Repeat the dose twice or three times a day until a cure is effected.

It is equally good for cattle and man in case of diarrhoea, chronic or otherwise. But some caution is necessary with human beings in haste to be well. Two eggs in twenty-four hours is quite as much as a *sick* man ought to take. More may induce fever or even insanity. I knew of one case when the patient, in haste for strength, took from four to six a day, and the result was temporary insanity.

To make them palatable, beat with sugar, and add nutmeg or any other spice and milk.

Among the diseases that cattle are subject to, none are more fatal than *bloody murrain*. The following is given as a certain

Cure for Bloody Murrain.

Take 1 tablespoonful of saltpetre, dissolved in $\frac{1}{2}$ pint of water, (for one dose.) Give three doses the first day, two the next, one the next, and so on. I have seen cattle cured with this when they were given up to die.

The above recipe may save some farmer enough to pay for this book a good many times over.

Texas, or Spanish Fever.

This is a disease that attacks cattle, more especially in Missouri, Kansas and the Southwest. The following is said to be a sure cure for it:

Take about a pint of soft soap, and about half a pint of salt; mix them well, and put of this mixture as much as you can around the horns of the diseased animal, close to the head, and bind it on with a cloth tied around the horns. This will warm the head and horns.

Next cut a slit in the fleshy part of the tail, about three inches long, into which put as much soot and ground black pepper as will lie on, and if the wound bleeds much, tie something around the tail to prevent it bleeding too much, but some bleeding will be a benefit to the animal. I have never known this remedy to fail.

Loss of Cud.

If an animal has lost its cud, the following plan may be adopted with a certainty that it will have the desired effect :

Take a dish rag and twist it like a rope, then tie a cord or strap on each end of it, and put the twisted rag into the animal's mouth ; then tie the cords, or straps, behind the horns, a little tighter than a bridle is secured to a horse's head, and it will be a certain remedy for lost cud.

Rinderpest.

It is not probable that at the present time there has been a case in this country of the disease known in Europe as the rinderpest. There have been cases among our cattle closely allied to it, and it is hardly possible that we should escape its visitation entirely. Here is a recipe for the only remedy that has ever been discovered of any appreciable efficacy :

Take equal portions of onion, shalot and garlic, peel them and pound them together to reduce them to a fine pulp ; add to this one-third of their weight of ground ginger. Take assafœtida about two-thirds of the weight of the ginger ; boil the whole in water. Boil some rice in water till thoroughly soft, and add the rice water to the mixture, so that the former may be one and a half times in excess of the latter. Dose for a full grown animal, a good pint.

Trichinae Preventive.

While it is undoubtedly true that there are well established cases of trichinae in this country, it is yet probably very limited in its range of operations. An ounce of prevention is said to be better than a pound of cure, and we therefore give the following recipe for a preventive, that has been used with marked success in Germany and other localities where the trichinae has prevailed :

Take three parts of salt, two of pulverized sulphur, and one of copperas—give to the swine twice a week in their slops.

To Cure Hog Cholera.

By some, the hog cholera has been pronounced nothing more nor less than the active developement of the trichinae, but that is probably a mistake. The following is an almost certain remedy for the hog cholera:

10 grains of calomel, 10 grains of copperas, and 10 drops of spirits of turpentine; to be given with slops if the diseased hog is able to eat; if otherwise, drench him.

Sore Throat in Swine.

Take ley, the same as is used for making soap, put it into an iron kettle, which place over the fire, and heat it the same as you do to make soap, then stir into it wheat bran, till it is as thick as mush, and when cool give it to the hogs in their trough, and they will eat it greedily, and it will effect a sure cure. Sometimes a second dose will be necessary, on the third day after taking the first.

Oak Graining.

The following formula for oak graining may be of service to somebody:

Take equal parts of raw and burned terra and senna, also about as much whiting finely ground in oil; then tone to a nice shade with raw and burnt umber. This must depend upon the tint desired and the color of the ground work. Also, break up finely a small piece of soap or beeswax, and mix thin for use, with equal parts of boiled and raw oil and turpentine.

Imitation Mahogany.

Black walnut furniture may be stained to imitate mahogany in the following way:

With a rag tacked to a stick, apply aquafortis and heat it in by the stove or in the hot sun. A brush would soon be destroyed by the aquafortis.

Fancy tables, stands, lounges, etc., may in this way be given every appearance of solid mahogany.

Rosewood Imitation.

A beautiful imitation of rosewood may be obtained by the application of the following preparation :

Take alcohol 1 gallon, camwood 2 pounds ; let them stand in a warm place 24 hours, then add 3 ounces extract of logwood, 1 ounce aqua fortis. When dissolved it is ready for use. Put on one or more coats according to taste.

For the dark streaks or grains apply in waves the following :

Put vinegar upon iron turnings or chippings and let it stand a few hours, when it is ready for use. Apply with a comb made of thinnish India rubber, with teeth about $\frac{1}{2}$ an inch long, and cut close together or further apart as desired. A little practice will make an excellent imitation.

To Remove Stains or Mildew from Furniture

The following will be found an excellent preparation for renovating old furniture or for refurbishing new furniture that has become dusty and a little faded.

Take best alcohol $\frac{1}{2}$ pint, gum shellac and rosin each $\frac{1}{4}$ ounce, pulverized. After these are cut in the alcohol, add $\frac{1}{2}$ pint linseed oil. Shake well and apply with a brush, cotton flannel, or an old newspaper, rubbing it thoroughly after the application.

Oil-Finished Furniture.

Unvarnished and unpainted furniture is every day coming into more general use. The following method of finishing will be found to be very nice :

Take boiled linseed oil and give the furniture a coat with a brush ; then immediately sprinkle best dry whiting upon it and rub in well with a brush that is worn rather short and stiff, or with your hand, all over the surface. The whiting absorbs the oil, and the pores of the wood are filled with a perfect coat of putty.

The whiting should be mixed with the least bit of paint for different kinds of wood—burned umber for black walnut, venetian red for cherry ; beech or maple will require a less quantity of red. Only enough

coloring is to be used to make the whitening the color of the wood that you wish to finish.

Furniture Varnish.

When black walnut or mahogany colored furniture becomes discolored or damaged, any one may at a very small cost "shine it up," as good as new.

Take a few cents worth of burnt umber and India red. For mahogany color, mix Indian red with copal varnish till the right color is secured; thin with benzine, and add a little boiled linseed oil, if it dries faster than is desirable. For black walnut color, mix both ingredients in such proportions as are necessary.

Solvents for Gum Shellac.

It is frequently desirable to dissolve gum shellac without the use of alcohol. The following will be found to answer the purpose;

Heat $1\frac{1}{2}$ pounds of shellac in 1 gallon rain water until the gum is soft and stringy, then add 1 pound saleratus, which will cut the gum and render the compound clear. This is used by some furniture dealers under the name of "light varnish." *Liquor ammonii caustici* (spirits of hartshorn) will dissolve shellac easily, within a few hours.

To Renew Faded Paint.

Take of boiled linseed oil 1 quart, spanish drying, 2 gills, and lay on with a brush. The old colors will be brought out as bright as new.

To Cut Glass.

It frequently happens that chemists and others wish to utilize some bottle or piece of broken glass apparatus, by cutting it in a certain manner. As some persons experience great difficulties in doing this, we insert the following simple means by which glass can be cut in any direction:

Take of powdered gum tragacanth, one-eighth of an ounce, dissolve it in sufficient water to form a middling thick paste, dissolve one fourth of an ounce of finely powdered gum benzoin in the least possible quantity of strong alcohol; mix both solu-

tions thoroughly and add to this a sufficient quantity of finely-powdered beech-wood charcoal to form a doughy mass a little thinner than pill compositions. Out of the above mass roll little sticks about four inches long and three lines thick, and let them dry spontaneously. If, after being thoroughly dried, one of these sticks is ignited, it burns to a fine point until it is entirely consumed.

The glass to be cut is first scratched deeply with a diamond, then one of the above sticks is ignited and held, with a very slight pressure, on the crack, in the direction the cut is to proceed, and it will be found that the cut will follow in any direction the taper may be drawn. The taper must be withdrawn every few seconds and brought to a more lively burn by brisk blowing, as it is cooled by the contact with the glass.

Artificial Rubies.

It is not expected that the patrons of this book will set up the manufacture of artificial precious stones, nevertheless rubies made after the following formula would be fully as precious as those made in Nature's crucible :

A mixture of fluoride of aluminium with a small quantity of fluoride of chromium is placed in an earthen crucible which has been lined with calcined alumina. In the center of this crucible, in the middle of the mixture of fluorides, is placed a small platinum crucible, containing boracic acid. The outer crucible, being well covered, is exposed to a heat sufficient to volatilize the boracic acid and the fluorides. The vapor of the boracic acid decomposes the fluorides, forming the fluoride of baron, and depositing crystals of the mixed oxyde of aluminium and chromium. If the fluorides be mixed in the right proportions, these crystals will have the same composition, color, luster, specific gravity, and other properties as natural rubies.

Artificial Ivory.

The most successful imitation of natural ivory is obtained by the following process ;

Dissolve either india rubber or gutta percha in chloroform, pass chlorine through the solution until it has acquired a light yellow tint; next wash well with alcohol, and add in a fine powder, either sulphate of baryta, sulphate of lime, sulphate of lead, alumina, or chalk, in quantity proportioned to the desired density, and tint; knead well and finally subject to heavy pressure. A very tough product, capable of taking a very high polish, is obtained in this way.

Diamond Cement.

Jewellers of Turkey, who are mostly Armenians, have a singular method of ornamenting watch cases, etc., with diamonds and other precious stones, by simply glueing or cementing them on. The stone is set in silver or gold, and the lower part of the metal made flat, or to correspond with the part to which it is to be fixed; it is then warmed gently and the glue applied, which is so very strong that the parts so cemented never separate. This glue which is also highly esteemed for uniting pieces of broken glass, for repairing precious stones and cementing them to watch cases and other ornaments, is made as follows :

Dissolve five or six bits of gum mastic, each the size of a large pea, in as much spirits of wine as will render it liquid; and in another vessel, dissolve as much isinglass, previously a little softened in water, (though none of the water must be used) in French brandy or good rum, as will make a two-ounce vial of very strong glue, adding two small bits of gum albanum, or ammoniacum, which must be rubbed or ground till they are dissolved. Then mix the whole with a sufficient heat. Keep the glue in a closely stopped vial, and, when it is to be used, set the vial in boiling water.

Persons have sold a composition under the name of Armenian cement both in England and this country, of bad quality and at most exorbitant prices. It is generally made much too thin, and the quantity of mastic too small. The following are good proportions :

Isinglass, soaked in water and dissolved in spirit, 2 ounces (thick); dissolve in this 10 grains of very pale gum ammoniac (in tears,) by rubbing them together; then add 6 large tears of gum mastic, dissolved in the least possible quantity of rectified spirits,

Isinglass, dissolved in proof spirit, as above, 3 ounces; bottoms of mastic varnish (thick but clear), $1\frac{1}{2}$ ounces; mix well.

When carefully made this cement resists moisture and dries colorless.

To Mend Crockery.

The following is a convenient and cheap preparation for mending crockery and glass ware ;

Take finely sifted fresh lime and the white of an egg ; mix it to the consistency of soft putty. Apply it to the edges, press firmly together, and immediately immerse it in hot water. Remove the surplus immediately, as it soon becomes as hard as the earthen, or glass itself. The more it is heated the firmer it becomes. Sift the lime through a piece of millinet.

Cement for Steam Boilers.

The following preparation will be found convenient for stopping leakages in steam boilers :

Mix 2 parts of litharge (oxide of lead) with 1 part very fine sand and 1 part quicklime, slacked spontaneously by exposure to the air. This mixture may be kept any length of time without injury. In using it a portion is mixed into paste with boiled linseed oil, when it must be quickly applied, as it soon becomes hard.

Rubber Cement.

A good cement for the soles of shoes, rubber shoes &c., is made as follows :

Take shreds of India rubber or gutta percha and dissolve them in refined turpentine or good naphtha. Apply to the soles of boots and shoes to make them water-proof.

Marine Glue.

The following preparation makes the strongest cement for wood known. Two pieces of wood joined with it can scarcely be sundered—it will be as easy to break the wood as the joint.

Dissolve 4 parts of India rubber in 34 parts of coal tar naphtha—aiding the solution with heat and agitation. The solution is then thick as cream, and it should be added to 64 parts powdered shellac, which must be heated in the mixture until all

ed. While the mixture is hot, pour it on plates of metal in sheets like leather. It can be kept in that state, and when required for use put into a kettle and heat till it is soft, then apply with a brush to the surfaces to be joined.

Another Cement.

The following makes a good cement for the joints of pretroleum stills:

Take 6 pounds graphite (black lead), 3 pounds dry slacked lime, 8 pounds sulphate of barytes and 3 pounds linseed oil, and mix them thoroughly together. The solid material must be reduced to a fine powder before being stirred into the linseed oil.—More oil may be added to make the cement sufficiently thin if necessary.

For Attaching Ornaments to Wood.

The following preparation makes a good cement for attaching architectural ornaments of various kinds to wood.

Take glue, chalk and paper pulp, equal parts and form into a cement. Or fine-sifted chalk and beeswax. Use equal parts of resin and wax, melt them and add the chalk until the composition attains the proper consistency.

A strong solution of glue and whiting makes a good cement for ivory.

Cement for Leather Belts.

A strong solution of isinglass makes the best cement for joining leather bands. It may be kept from becoming mouldy by adding to it some whiskey and a little of the essential oil of cloves, or a little camphorated spirits.

Cement for Brick Walls.

Bricks, being very porous, absorb moisture freely, and hence brick walls when exposed to long and severe rain storms, frequently become penetrated so as to dampen the plaster inside, which renders the room damp and unhealthy, besides injuring the wall. The best water proof composition that can be used to prevent this, is a mixture of hydraulic cement and boiled linseed oil.

Cheap Prepared Glue.

Dissolve common glue in cider vinegar, as thick as may be wanted. As it becomes too thick from time to time add a little vinegar.

The above will be found as good as Spaulding's or any other prepared glue that can be purchased.

Cement for Rooms.

The following process will be found superior to any other hard finish for parlors, etc. :

Mix the oxide of zinc with size made up like a wash, and apply to a wall, ceiling or wainscot. Afterward mix the chloride of zinc in the same way, with which give a second coating. The oxide and chloride immediately combine and form a kind of cement, smooth and polished as glass, and possessing the advantages of oil paint, yet without any objectionable smell.

White Cement.

The following simple preparation will make a cement for statuary, china, glass or alabaster that will stand most any ordinary amount of washing, even in hot water, though we will not say that it cannot be soaked soft.

Dissolve best Russian isinglass in pure soft water, by letting it soak 12 hours to soften, then apply a moderate heat until it is fully dissolved; it is then ready for use.

Another.

The following recipe has been sold about the country for from 25 cents to \$5. Rightly made of good materials, it may be kept on hand ready for use, and is a very convenient preparation :

Dissolve 1 pound and 10 ounces best white glue in the usual way, by heating in a kettle or dish set in hot water, then add 6 ounces of dry white lead, and boil until they are thoroughly mixed. Remove from the fire and when partially cool, add 1 pint of alcohol, bottle and keep corked.

Convenient Paste.

The following recipe will be found convenient for everybody. It is just the thing you want if you are making a scrap book:

Take common glue 4 ounces and dissolve it as above, and add 4 ounces pulverized alum; mix 1 teaspoonful flour in a little water; stir it in and boil. When nearly cool stir in 2 teaspoonfuls oil of lavender, and it is ready for use. Keep tightly covered when not in use.

Cracks in Wooden Furniture.

Season cracks, etc., in wooden furniture may be filled up and obliterated with the following preparation.

Moisten a piece of recently burnt lime with enough water to make it fall into powder; mix one part of the slacked lime with two parts of rye flour, and a sufficient quantity of boiled linseed oil to form it into a thick plastic mass.

To Preserve Timber.

Timber for various purposes may be preserved a long time by the application of the following preparation:

Take equal parts by weight of flour of sulphur and linseed oil and mix them thoroughly, and then add 12 per cent. of the oxide of manganese. The timber is rendered impervious to moisture.

New Oak Barrels.

The following method will effectually prevent new oaken barrels from coloring spirits or anything.

Dissolve 1 part of ammonia alum and 2 parts of sulphate of iron in 97 parts water. Wash well the casks with this solution, boiling hot, and allow them to stand 24 hours. Then rinse out the casks well and dry them, and finally give them a washing with a thin solution of silicate of soda.

Camphor Storm Glass.

Dealers in philosophical and optical instruments sell simple storm-glasses, which are used for the pur-

pose of indicating approaching storms. One of these consists of a glass tube, about ten inches in length and three-fourths of an inch in diameter, filled with a liquid containing camphor, and having its mouth covered with a piece of bladder perforated with a needle. A tall phial will answer the purpose nearly as well as a ten-inch tube.

The composition placed within the tube consists of 2 drachms of camphor, $\frac{1}{2}$ a drachm of pure saltpetre, and $\frac{1}{2}$ a drachm of muriate of ammonia, pulverized and mixed with about 2 ounces of proof spirits. The tube is usually suspended by a thread near a window, and the functions of its contents are as follows: If the atmosphere is dry and the weather promises to be settled, the solid parts of the camphor in the liquid contained in the tube will remain at the bottom, and the liquid above will be quite clear; but on the approach of a change to rain, the solid matter will gradually rise, and small crystalline stars will float about in the liquid. On the approach of high winds, the solid parts of the camphor will rise in the form of leaves, and appear near the surface in a state resembling fermentation. These indications are sometimes manifested twenty-four hours before a storm breaks out.

After some experience in observing the motions of the camphor matter in the tube, the magnitude of a coming storm may be estimated; also its direction, insomuch as the particles lie closer together on that side of the tube that is opposite to that from which the coming storm will approach. The cause of some of these indications is as yet unknown; but the leading principle is the solubility of camphor in alcohol, and its insolubility in water, combined with the fact that the dryer the atmosphere, the more aqueous vapor does it take up; and vice versa.

Varnish for Wood Patterns.

The following, which is the most simple and at

the same time best adapted to the purpose, will be found of special interest to moulders, furnace men and pattern-makers.

Take 1 quart of alcohol and $\frac{1}{4}$ pound of gum shellac; put into a bottle and when dissolved it is ready for use. When wanted for application, mix with a little turpentine to about the thickness of cream, and varnish the pattern over, rubbing it into the grain of the wood, until a slight friction produces a polish.

The above varnish makes a smooth surface on the pattern, rendering it more easily drawn from the sand, and it fills up all pores or worm holes that may be in the wood, consequently a cleaner and smoother casting is produced.

Varnish for Iron Work.

The following preparation forms one of the finest black varnishes for iron work in use.

Fuse 1 pound of amber in an iron vessel, and while hot add 1 quart of linseed oil and 3 ounces each of dark rosin and asphaltum in powder. When the whole is thoroughly incorporated, take it off, and when cool add 1 pint of turpentine. Several coats of this varnish are put on, and the articles are dried after each application in a warm oven.

Here is another recipe for the same purpose :

Take 8 pounds asphaltum, fuse it in an iron kettle and add 5 gallons of linseed oil, 1 pound of litharge, and $\frac{1}{2}$ pound sulphate of zinc. Add these (slowly or it will fume over), and boil them for 3 hours. Now add $1\frac{1}{2}$ pounds of dark gum-amber and boil 2 hours longer, or until the mass will become quite thick when cool, after which it should be thinned with turpentine to due consistency.

Crystal Varnish.

The following will be found an excellent varnish for maps, prints, drawings and also to prepare tracing paper and to transfer engravings :

Mix equal parts of genuine pale Canada balsam and rectified oil of turpentine. Place the bottle in warm water, shake it well,

and set it aside for a week in a moderately warm place; then pour off the clear.

To Revive Faded Black Cloths.

Worn and faded black clothes may be revived and made to look as good as new by the process below :

Boil two or three ounces of logwood in vinegar, and when the color is extracted, drop in a piece of carbonate of iron, which is of the same nature as rust of iron, as large as a chestnut ; let it boil. Have the coat or pantaloons well sponged with soap and hot water, laying them on a table, and brush the nap down with a sponge. Then take the dye upon the table, and sponge them all over with the dye, taking care to keep them smooth and to brush downward. When completely wet with dye, dissolve a teaspoonful of saleratus in warm water, and sponge all over with this, and it sets the color so completely that nothing rubs off.—They must not be wrung or wrinkled, but carefully hung up to drain. The brownest cloth may be made a perfect black in this simple manner.

Bosoms and Collars.

The following directions will enable the most ordinary ironer to make her clothes look as if just from the hands of the manufacturer :

Pour a pint of boiling water upon two ounces of gum arabic, cover it and let it stand over night; in the morning pour it carefully from the dregs into a clean bottle, cork it and keep it for future use. A tablespoonful of this gum arabic water stirred in a pint of starch made in the usual manner will give to lawns, either white or printed, a look of newness, when nothing else can restore them after they have been washed. To every pint of starch add a piece of tallow or spermaceti candle the size of a chestnut.

COLORED STARCH.—Green, pink, buff, and mauve starch is now made, and by its aid any delicate fabric may be colored as well as stiffened. The same garment can be made to assume a different tint as often as desired.

Fire Proof Ladies' Dresses.

The finest linen, cotton, cambric or muslin dresses may be rendered perfectly fire-proof at a mere nom-

inal cost, by steeping in a diluted solution of chloride of zinc.

Fire Proof Shingles.

Shingle roofs may be rendered fire proof under ordinary circumstances, by the following process :

Take $\frac{1}{2}$ a bushel of lime, $\frac{1}{2}$ a bushel of refuse salt, and 5 pounds of potash, and water enough to slake the lime and dissolve the alkali and salt. Mix these up in an old trough or box. Then set a bundle of shingles into the mixture, nearly up to the bands, leaving them soaking for full two hours. Then turn over the bunch and put in the other side for the same length of time. As exposure to rain and sunshine will, in time, take out the strength of this mixture, it should be applied fresh once in 3 or 4 years.

To Keep Tires on Wheels.

If the felloes of wagon wheels are filled with linseed oil before the tires are put on, they will not get loose for several years. This is a recipe that will not particularly interest blacksmiths and wagon makers, but farmers and teamsters will find it to their interest to make use of it. Tires thus put on will wear out without coming loose.

Take an iron trough or heater (one of cast iron made for the purpose is best); fill with linseed oil, and bring to a boiling heat. The wheel is then placed on a stick, so as to hang each felloe in the oil. The timber must be dry and care must be taken that the oil be no hotter than boiling heat, or the wood will be scorched. Timber filled with oil is not susceptible to water, and there can therefore be no swelling or shrinking, and the timber is rendered more durable.

Care of Stoves and Pipes.

When stoves are no longer needed, they are quite frequently set aside in an out-building, or other out-of-the-way place, with no further thought until again wanted for use. If neglected, the rust of the sum-

mer may injure them more than the whole winter's wear, particularly the parts made of sheet iron.

They should be kept as free from dampness as possible, and occasionally cleaned if rust be observed. It is best to apply a coating of linseed oil to the pipes before putting them away. It should be done while they are warm (not hot) and keep a low temperature 5 or 6 hours. This is said to impart a fine lustre, and prevent rusting.

To Harden Lard for Candles.

It frequently happens that you have plenty of lard and no tallow, and you want a few candles for a special purpose. By the following method you may make good hard candles out of lard :

Put 8 pounds of lard into a 2 gallon kettle, or one so large that it won't boil over; heat it so that it will sputter a little when a drop of water is dropped in, then set it out doors, and pour in 1 ounce of nitric acid, and stir it until it is done boiling. It must be run or moulded. Mixing in a little tallow will make them come out of the molds readily, as tallow shrinks more than lard when cold.

To Prevent the Accumulation of Soot in Chimneys.

Half the fires of the country are occasioned by defects in chimneys indirectly, and directly by their "burning out," or the accumulated soot catching fire and burning the entire length of the chimney. Then if there is any crack or crevice in the chimney it is found out, and a conflagration frequently the consequence. By pursuing the following course in building chimneys, all that risk may be avoided.

In building a chimney put a quantity of salt into the mortar with which the interstices of brick are to be laid. The effect will be that there will never be any accumulation of soot in that chimney. The philosophy is thus stated : The salt in the portion of mortar which is exposed, absorbs moisture every damp day. The soot thus becoming damp falls down the fireplace.

To Prevent Smut in Wheat.

The following plan has been followed by several of our most successful farmer's, and always with the happiest results. Our friend Henry Williams followed this plan for preparing his seed for two or three years, and while his neighbors were troubled with smut in their wheat, his was not affected:

Take 1 pound of blue vitriol in 5 gallons of water as a soak for seed wheat to prevent rust. The grain is soaked in it an hour and sowed immediately. The usual practice is to soak the seed in strong brine, and use about a $\frac{1}{4}$ of a pound of blue vitriol, (sulphate of copper) to 5 gallons of brine. After the seed has been in this pickle for several hours, it is spread on a floor, rolled in dry slacked lime, and sowed as soon as practicable. The brine floats off all the light seed and also aids the copper salt in killing the smut.

To Change Photographs or Lithographs into Oil Paintings on Glass.

The following has been sold for \$2, \$3, and even \$5. For those who have the leisure and the taste, it will be worth all they pay for the book.

Take common window glass the size of your picture, and tack it in the frame firmly, and clean it well, then give the glass one coat of white demar varnish; (make the varnish thin with turpentine before using,) and put the glass away after being varnished, twenty four hours where it will be free from dust. If your picture is of thick paper, sand-paper the back of it until it becomes very thin; when the glass is perfectly dry, use the following recipe for making the picture adhere to the glass:

Take one pint of balsam of fir to a half pint of turpentine; put them in a bottle and shake them well together until thoroughly mixed. Give the glass a heavy coat of the balsam mixture on the varnished side of the glass; then place the picture on with the face side down, then press the back of the picture with your fingers until it adheres firmly to the glass, and becomes perfectly free from spots on the face of the picture. After you have done this put the picture away until it dries, where it will be free from dust.

The balsam mixture must be applied with a flat camel's hair brush two inches wide. Brushes for painting the pictures in oil colors, artist's round camel's hair brushes with long handles.

DIRECTIONS FOR PAINTING THE PICTURES.

Paint the dark part of the eye first, as you may fancy, dark or

or blue; then color the cheeks and lips; and after the dark part of the eye is dry, paint the white part, and color the dress to suit your taste; but whatever part of the dress you want to be white, you must paint first, and the gold ornaments with yellow paint; also give the picture three coats of paint of every color you use, letting each coat dry well separately, leaving the flesh color until the last, letting the picture dry well before applying it, and give it three separate coats of paint.

PAINTS FOR COLORING THE PICTURES.

For Red—Chinese Vermillion.

For Green—Chrome Green.

For Black—Ivory Black.

For Blue—Prussian Blue.

For Yellow—Chrome Yellow.

For White—Silver White.

Flesh Color—Red, Yellow, with White.

Black Hair—Vandyke Brown.

Gray Hair—White, Black and Yellow Ochre.

Light Hair—Yellow Ochre, White and Vandyke Brown.

Black Eyes—Pupil, Black, Iris, Vandyke Brown.

Brown—Red and Black.

Blue Eyes—Pupil, Black, Iris, Blue and White.

White of Eye—White tinted with Blue.

Complexion—White tinted with Vermillion.

Lips—Vermillion and White.

Drapery: Dress—Any color you choose.

Foliage: Deep Green—Prussian Blue and Yellow Ochre.

Foliage: Medium—Prussian Blue and Chrome Yellow.

Water—White tinted with Blue.

Sky—White tinted with Blue and Vermillion.

Mahogany—India Red, Vermillion and Vandyke Brown.

Silver, Marble, Steel and Glass—White tinted with Black.

Stone—Yellow Ochre or Vandyke Brown and White.

Straw—King's Yellow and White.

Gold—Kings Yellow.

Grape or Purple—Blue, Scarlet Lake and White.

Lire—Vermillion and Chrome Yellow.

Brick—Indian Red.

Oak—Yellow Ochre, Vermillion and White.

All the colors must be ground in oil, and used in demar varnish and turpentine for drying the paints. Use a small picture to begin with until you get into practice.

For making a lighter shade of color, put one drop of your light paint into the dark paint, and add it by drops until it becomes the shade you may want.

Brass Coating.

Brass plates and rods may be covered with a superficial coating of brass, by exposing them in a heated state to the fumes of melted zinc at a high temperature. The celebrated spurious gold wire of Lyons, is thus made. Vessels of copper may be coated with brass, internally, by filling them with water strongly acidulated with muriatic acid, adding some amalgam of zinc and cream of tartar, and then boiling for a short time.

To Make Burning Fluid.

The following is a formula for making common burning fluid. Kerosene has been brought to such perfection and is furnished so cheap that it has almost superseded burning fluid, still there are cases where it is necessary or more convenient to use the latter.

Dissolve 1 ounce gum camphor in three gallons alcohol, and add 1 gallon camphene, and shake till they are well mixed.

Many persons suppose that camphene is an explosive burning fluid, but this is a mistake. Camphene is simply rectified spirits of turpentine. Its vapor, mixed with a certain portion of air is, no doubt explosive, but not the fluid.

Water and Weed Proof Garden Walks.

There is so greater nuisance to the amateur gardener than muddy and weedy walks. To keep the walks in anything like a presentable condition is nearly as much work as all the rest of the garden. Walks made after the following plan will do away with all that work :

Procure a sufficient quantity of the best Portland cement ; then turn up the path with a pick, and mix six parts, by measure, of clean screened gravel with three of sharp sand, and one of cement ; then work them thoroughly with the spade in the dry state. Now add sufficient water to make them into a paste similar to stiff mortar, and lay it down on the walk, on a hard bottom to a depth of two inches. It is spread with a spade, and the walk made with a slight curve, rising in the middle. In forty-eight hours it becomes as hard as stone, and not a drop of water will pass through. Worms will not work through, nor a blade of grass grow upon it.

To Kill Weeds in Walks.

Those who do not wish to be to the trouble of

making their walks as above, will find the following a cheap method of ridding their walks of weeds. It is said to be certain-death to the weeds, and to flower borders as well, if the application is made :

Take water 10 gallons, stone lime 20 pounds, and flour of sulphur, 2 pounds. Mix and boil in an iron kettle. After settling, pour off the clear part and apply freely to the weedy walks.

To Destroy Flies.

Kitchens, Pantries, Dining Rooms, &c., may be kept clear of flies all summer, by the following method, without the danger attending poison :

To 1 pint milk add a quarter pound of raw sugar, and 2 ounces ground pepper ; simmer them together eight or ten minutes, and place it about in shallow dishes. The flies attack it readily, and are soon suffocated.

Dead Shot for Bugs, &c.

Powdered borax, sprinkled liberally in spots infested by bugs, cockroaches, &c., is said to be a dead shot for them. The borate of soda is a sweet alkali that "charms (bugs) while it kills."

To Exterminate Red Ants.

The little red ant is a great nuisance. If they once take possession of a dwelling, and find convenient refuge in the walls, it will take some time to exterminate them, but it can be done by either of the following methods, with patience and perseverance :

Procure two pieces of thin boards, say two feet long, eight inches wide, and fasten two edges together with hinges, so that they will close like the covers of a book. Spread a little molasses on the under board, and as often as a few ants are seen on it, press the upper board down and crush them. In a few days they can all be destroyed. Another way is to put some molasses into a milk pan, and place a piece of board against the side of it, so that they can ascend to the top of the pan. They are sure to tumble into the molasses, and cannot get out alone. Perhaps the following is a better way :—

Procure a large sponge, sprinkle a little sugar through it and place it near the haunts of ants. When a quantity of them have collected in the interstices they can be killed in hot water, the sponge dried baited, and set again. In this way whole armies of the ants can be readily destroyed.

Rat Exterminator.

There is no greater or more disgusting nuisance about a house than a multitude of rats. Anything that kills or frightens them away, is preferable to their presence. You will find the following a sure thing on them, and just as good, if not the same composition as Costar's celebrated Rat Exterminator.

Take flour, 3 pounds, and make into a thick paste with water; then dissolve phosphorus 1 ounce, in $\frac{1}{4}$ ounce of butter, by heat, and mix with the paste. Spread on pieces of bread and leave it where the rats can get it; or make it into balls covered with sugar. Put in two ounces of pulverized tumeric, and put into a tightly covered box for future use or sale.

ANOTHER.—Take warm water 1 quart, lard 2 pounds, phosphorus 1 ounce. Mix and thicken with flour.

To Drive Away Rats.

Take pulverized potash and sprinkle liberally into their holes. The potash will burn their toes and they will soon look for a more congenial home. Potash exposed to the air will soon dissolve or soften into a paste, when it can be daubed on their run-ways.

To Get rid of Flies and Insects.

Chloride of lime scattered in the stable will drive away all kinds of flies, especially biting flies. Sprinkling beds of vegetables with a weak solution of chloride of lime, effectually preserves them from caterpillars, butterflies, mordella, slugs, &c. It has the same effect when sprinkled upon the foliage of fruit trees. A paste of one part lard and two parts powdered chloride of lime, placed in a narrow band around the trunk of a tree, will prevent insects from creeping up it. Rats and mice will soon quit places where chloride of lime has been spread.

To Destroy Hop Lice.

The extent to which the culture of hops is being introduced in this country will be a sufficient excuse for inserting the following recipes for ridding hop vines of their most destructive enemy—hop lice:

Take soap suds, strong as left from an ordinary washing ; add saltpeter and salt enough to make it a weak brine, not too strong, as that might injure the plant ; then add one pound of copperas. Apply to the vines with a syringe, where they are not too high. If tall poles are used apply with a force pump.

English Remedy.

The following preparation is used successfully in England for the same purpose :

Take 20 pounds coarse tobacco and soak it in 20 gallons of water three days. If the liquid is too thick, reduce it by adding water. Apply as above.

This is the way it is used in England. It is said to be rendered more effectual by adding a little salt and copperas.

To Destroy the Onion Fly.

Many a promising bed of onions is destroyed by the small black onion fly. A farmer who has been successful in raising large crops of onions every year, while his neighbors have entirely failed, has pursued the following course :

He destroys the maggot by pouring a small stream of boiling water along the drills near the roots of the plants. His theory is, that the ground is sufficiently heated to destroy the tender maggot, but not warm enough to injure the onion plant. He goes over his bed four times during the season.

Dr. O. W. Drew, of Waterbury, Vt., poured boiling hot water from a large tea-kettle directly upon each row, when the plants were about four inches high.

To Destroy Insects upon Fruit Trees.

Science frequently comes to the aid of labor. It has been found that bark lice and many other insects

That afflict fruit trees, can be destroyed to death with calomel.

Bore a hole in the trunk of your fruit trees nearly through the sap—insert two or three grains of calomel and plug up the hole. The insects will die and drop off.

Cheat the Bugs.

A successful horticulturist gives his method of saving his squash, cucumber and melon vines as follows :

Make boxes 8 to 10 inches high, open on two sides, and set them over the hills, as soon as the plants come up. The bugs fly near the ground, and the plants are not seen by them, when within boxes as above described. After the vines get large and strong, the bugs can't hurt them.

For the Preservation of Leather.

The following is a French method for preserving all kinds of leather, and is especially adapted to boots, shoes, harness leather and belting, and is said to insure great durability to leather, and to make it very pliable and soft. The preparation consists of tallow, soap, rosin and water, prepared as follows :

21 parts of tallow are melted in a vessel, 3 parts of rosin added; and the two when melted, mixed well together. In another vessel, 7 parts of good washing soap are dissolved in 70 parts of pure rain water. After it is dissolved, and the mass heated to the boiling point, we add the part prepared before; let it boil once more gently, and the preparation is ready for use.

Iron Rust on White Stuffs.

The worst iron rust stains may be removed from linen and other white stuffs in this way :

Dissolve oxalic acid in water; spread in the sunlight and apply the acid to the spot, which will very soon disappear. It will remove many other stains.

Care should be taken to keep the acid in a safe place as it is an active poison, and the mixture must

not be too strong, or it will injure the fabric itself. It should be well washed out almost as soon as applied.

Another.

Here is another plan which has no dangerous points about it, and on that account is preferable, although it may not be quite so effective.

Wash the cloth through one suds and rinse. While wet, rub ripe tomato juice on the spots. Expose it to hot sunshine until nearly dry, and wash in another suds.

To Remove Ink Spots.

Ink spots may be removed from white clothes in the following manner, and it must be done before the clothes are washed :

Pick some tallow from the bottom of a clean mould candle, rub it hard on the ink-spots, and leave it sticking there in bits until the next day or longer. Then let the articles be washed and boiled ; and if it be merely common ink, the stain will entirely disappear. Of course this remedy can only be used for white as colored clothes cannot be boiled without entirely fading them. We know it to be efficacious. The tallow must be rubbed on cold.

Another Way.

A most effective preparation for removing ink-spots may be made as follows :

An ounce each of sal ammonia and salt of tartar, well mixed, must be put in a quart bottle, a pint of cold soft water be added to them, and the whole well shaken for a quarter of an hour. The bottle may be then filled with water, shaken a little longer and corked. Wet the marked linen effectually with this mixture, and repeat the process until the stain disappears.

STILL ANOTHER.—Ink spots may be removed if taken when fresh, by throwing over the spot plentifully, salt and pepper.

Grease Spots in Woolen Cloth.

The following is the cheapest and most effectual preparation for extracting grease from woolen cloth :

Take liquid ammonia, one part, alcohol four parts, and mix with a quantity of water equal to the other two. Keep in a glass stoppered bottle. Apply with a piece of sponge, soaking the cloth thoroughly when the grease has remained any considerable time in the fabric.

To Clean Ribbons.

Ribbons may be cleaned to advantage in the following way:

Wet the ribbon in alcohol, and fasten one end of it to something firm; hold the other in your hand, keeping the ribbon out straight and smooth; rub it with a piece of castile soap until it looks decidedly soapy, then rub hard with a sponge, or if much soiled, with the back of a knife, keeping the ribbon dripping wet with alcohol. When you have exhausted your patience, and think it must be clean, rinse thoroughly in alcohol, fold between cloths and iron with a hot iron. Don't wring the ribbon; if you do, you will get creases in it that you cannot smooth out.

To Purify Rancid Lard.

An inquiry for a means of restoring rancid lard is frequently made. The following method has been proved to be reliable in all ordinary cases:

Take 3 ounces of the chloride of soda, pour into a pail of soft water, bring to a boil and add the lard. After boiling thoroughly together for an hour or two, set aside to cool. When cool take the lard off and boil it up by itself. The color will be restored to an alabaster white, and the lard rendered sweet as a rose.

ANOTHER WAY.—Put rancid lard, pot skimmings, or bacon fat into a kettle, and add three potatoes pared and sliced. Let them fry in the grease until they are browned. The grease or lard will be free from all unpleasant taste and suitable for shortening, or to fry doughnuts in.

For Curing Meat.

There is no part of a housekeeper's duty more important than to be able to properly pack or cure the year's supply of beef and pork. The following recipe may be implicitly relied on, and if properly tried will never be abandoned:

To 1 gallon of water add $1\frac{1}{2}$ pounds of salt, $\frac{1}{2}$ pound sugar, $\frac{1}{2}$ ounce saltpetre, $\frac{1}{2}$ ounce potash. In this ratio the pickle to be increased to any desirable quantity. Let these be boiled together

until all the dirt from the sugar rises to the top and is skimmed off. Then throw it into a tub to cool, and when *cold*, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre, which removes all the surface blood, &c., leaving the meat fresh and clean. Some omit boiling the pickle, and find it to answer well, though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar. If this recipe is properly tried, it will never be abandoned. There is none that surpasses it, if so good.

Another.

Here is another plan that is highly spoken of by those who have tried it, and we have no hesitation in commending it to the patrons of this book:

To each 100 pounds of beef, take 6 pounds of salt, 1 pound of sugar, 2 ounces of soda and 3 gallons of water. Mix together in a large kettle and place it over the fire, letting it remain until it boils; take off the scum and let cool; pour it over the meat, which should be placed in a tight cask or barrel, until the meat is entirely covered; If there is not enough pickle to cover the meat, add a little more water; but the above amount will be sufficient, if the meat is properly packed. Beef put down in pickle, pressed as above, will retain its former freshness, and will be as sweet and juicy for a month afterwards, as when first put away.

To Keep Beef.

The following is called by many the *best* method for keeping beef. By this method farmers can have fresh meat nearly all the time. Try it.

Cut up the meat in pieces as large as you desire. Pack it in a barrel or cask. Then make a brine as follows: $1\frac{1}{2}$ pounds salt, 1 gallon water, 1 ounce saltpetre to 100 pounds beef. Put in the salt and saltpetre and heat it boiling hot, skim it, then add black pepper. Pour it on the beef boiling hot and cover closely. Your meat will be good and fresh any time. The philosophy is this—the hot brine closes the pores on the surface, preventing decay and the meat from getting too salt.

ANOTHER GOOD WAY.—Cut it in slices ready to broil or fry for the table. Then put down in a jar one laying of meat, sprinkle with salt and pepper, and so continue till the jar is filled; cover closely and set in the coolest part of the cellar. It will keep a long time.

To Cure And Keep Hams.

There is nothing in the meat line more universally esteemed, whether fried with eggs or boiled and eaten cold, or used for sandwiches, than sweet, juicy, rightly smoked ham. One who has long been noted for furnishing the best hams we have ever eaten, always pursued the following method in curing, smoking and preserving them :

Unless the weather is warm so that they are liable to taint, all hams should lie and shrink at least three days after being cut and trimmed. Then weigh ; add for each pound of meat one ounce of saltpetre, and add to it a brine so strong that no more salt will dissolve in it, the brine having been first scalded. About twenty days will be the medium length of the time that the hams should remain submerged in the brine—five days more for large, and five less for small ones. Then lay out and let them drain for three days before hanging in the smoke-house. Having been sufficiently smoked, wipe off clean all soot, cobwebs and dirt, and then rub thoroughly over the hams a mixture made pretty thick of ground black pepper and litharge; made liquid by three times the weight of common neat's foot glue dissolved in water. Hang them up in any cool, dry place—no fly, worm or bug will ever molest them, and your hams thus prepared will keep sound a century, if not sooner eaten.

Another Plan.

The following is the celebrated "Knickerbocker Pickle," for curing hams :

For 100 pounds of meat take 6 gallons of water, 9 pounds of salt, 3 pounds of sugar, 1 quart of molasses, 3 ounces of saltpetre, 1 ounce of saleratus. Place the whole in a kettle, and bring to a boiling heat, and skim of all impurities as it begins to boil : and when cold, pour it over the meat, after being closely packed.—Pickle as long as you please, from November to March, and the meat if not over-heated and spoiled in smoking, will keep through the summer in good condition, and only seasoned to the tastes of most palates.

Still Another.

The following is the southern method, and has taken the premium over all others at several southern State Fairs :

To 150 pounds of ham take $1\frac{1}{4}$ ounces saltpetre, 4 quarts fine salt, with enough molasses to make paste; rub well on the flesh side; let it lie four weeks; then hang and smoke two days before removing from the smoke-house; rub with black pepper and strong vinegar after which bag them.

Another Plan.

It is said there is safety in a multitude of counselors; we therefore give one more method for curing hams:

Take of rock salt 9 pounds, saltpetre 6 ounces, molasses 3 pints, for 100 pounds of meat.

To Clean Tripe.

Though many people have an antipathy to this article, some think it a great luxury—a rare tit-bit—--and for the benefit of such we give the following:

In removing the stomach, be careful to keep the outside clean. Shake the contents well out through a small hole, and put in a quantity of unslaked lime about the size of a coffee cup, with about 2 gallons of water. Place it in a tub of water and agitate 15 or 20 minutes, or until the lime is well slaked. A slight scraping will then remove the inside skin. The slaking lime takes out all odor, and makes the tripe nice and soft. After cutting up and washing well, it is ready for boiling, and may then be pickled in vinegar, or kept in salt water, to be changed daily and cooked like souse, or broiled like steak, buttered and peppered; or dipped in batter and fried.

Boiling Meats.

The following remarks on the subject of boiling meats, are so sensible, and calculated to mitigate the dry, tasteless stuff that we frequently have put before us as a part of the “boiled pot,” that we give it a place among our most valuable recipes:

Never put meats in cold water, but plump them into that which is boiling briskly. This will coagulate the albumen on the outside, close the pores, and prevent the water from soaking out the rich juices. If salted meats need freshening, let it be previously done with cold water, taking all needed time, with frequent changing of the water, if it is very salt. Tough, cheap pieces of beef, can be made tender and palatable, as follows: If salt, freshen as

above. Put into the pot with a trifle more water than will be finally needed. Set into the top of the cooking pot a closely fitting tin pail or pan, and fill it with cold water. If this gets boiling hot, dip out some and add cold water from time to time. Boil the meat until it gets so entirely tender that the bones will drop out, even if it takes five or ten hours. The steam and aroma, or flavor of the meat, will be condensed on the bottom of the covering pan or pail of water, and drop back, and thus be retained.—When thoroughly done, remove the cover and slowly simmer down thick enough to jelly when cold. Dip out the meat, remove the bones, place it in a pan, pour over it the boiled liquid, lay over it a large plate or inverted tin platter, and put on 15 to 30 pounds weight. When cold, it will cut into nice slices, and if lean and fat or white meat be mixed, it will be beautifully marbled. The juice will jelly, and compact it firmly together, and you will have nice juicy meat, good for breakfast, dinner or supper, and so tender that poor teeth can masticate it. Fresh beef, or corned beef well freshened in cold water, may be used in this way with decided economy, and it is far superior to meat boiled in an open vessel from which the flavor has constantly escaped, as you can perceive by the odor all through the house, if Bridget leaves the kitchen door open a minute or two, as she will certainly happen to do.

To Sweeten Rancid Butter.

Rancid butter may be renovated and made sweet and palatable by the following process:

For 100 pounds rancid butter, take 2 pounds fine white powdered sugar, 2 ounces saltpetre finely pulverized, and as much fine dairy salt as you wish to add to the butter to make it to your taste.

The butter should be thoroughly washed in cold water before working in the above ingredients.—The amount used should be in proportion to the strongness of the butter. Smaller quantities of butter may be cleansed by using the same proportions.

To Preserve Butter.

Butter may be preserved for a long time by the following process:

Take 2 parts best common salt, 1 part of sugar and 1 part of saltpetre, and blend the whole completely. Take 1 ounce of this composition for 1 pound of butter; work it well into a mass and close it for future use. Butter thus cured requires to stand 3 or 4 weeks before it is used:

To Extract Grease from Cloth.

The following is undoubtedly the best remedy extant for removing grease spots from woollen or any other kind of cloth :

To $\frac{1}{2}$ pint alcohol add 10 grains carbonate of potash, $\frac{1}{2}$ ounce oil of bergamot and 1 ounce sulphuric ether; mix and keep in a glass-stoppered bottle. Apply with a piece of sponge, soaking the cloth thoroughly, when the grease is not recent. The mixture emits a peculiarly fragrant odor, and being a fluid soap chemically composed, will be found a perfect solvent for oily matter.

Another Method.

The following method will effectually remove grease spots from silks, woollen goods, paper and floors :

Grate on the spots best French chalk (or the common will answer though not quite as good), cover them with brown paper and set on a moderately warm iron and let it stand till cool.—Care must be taken not to have the iron too hot, or it may scorch or change the color of the cloth. If the first operation does not entirely succeed, repeat the process.

Moths.

Moths are a great nuisance to housekeepers.—There is hardly anything in the line of clothing but that has to be watched and saved from the depredations of these destructive pests. There are many ways to prevent their ravages. The following is cheap and easily applied :

Sprinkle turpentine on pieces of flannel; wrap these in paper and lay them among the clothing, or articles likely to be attacked by the moth. It will prove a perfect preventive.

ANOTHER.—The woollen moth may be prevented by the use of camphor gum tied with the clothing. Perhaps the most agreeable for wearing apparel is a mixture of 1 ounce cloves, 1 ounce rhubarb, and 1 ounce of cedar shavings, tied up in a bag and kept in a box. Or scatter the dry substance in the folds of the cloths, carpet, blanket or furs.

To Save the Vines.

Many people lose a promising patch of watermelon, squash or cucumber vines, for not knowing how to prevent the ravages of the little yellow bug. A tablespoonful of slaked lime sprinkled underneath each vine will drive away every bug. This is easily tried.

Oil to Kill Insects.

It has lately been demonstrated that coal oil diluted with water is death to all kinds of insects. One great point in favor of its use in the garden is, that it acts as a manure to vegetation, while dealing out death to insects. Cabbage beds that have been almost destroyed by the little black cabbage beetle or bug may be revived and the whole crop of bugs destroyed by the application of this remedy. The black beetles or bugs that literally eat up young turnip plants, cabbage and cauliflower plants, eggplants, &c., may be almost instantaneously killed off. Apply as follows:

Put about 1 tablespoonful of coal oil into a common sized garden sprinkling pot, stir well and sprinkle over the beds, plants or vines affected. Care must be taken to have the water in the pot well stirred when used, so that a portion of the oil gets out as the water runs, otherwise the oil floating on the top of the water will stay there till all the water goes out and only the oil be left for the last,

To Destroy Insect Parasites.

It has lately been ascertained that benzine diluted with water is one of the surest and safest articles that can be used to destroy the parasites that infest

dogs, and other animals. It has been used in an undiluted state to kill the minute insect which causes the disease in the human body called *scabies*—commonly known as itch. When used upon animals it has been found to answer better when very much diluted, than when pure. The following are the best proportions for the preparation :

Take benzine 5 parts, soap 10 parts, and water 85 parts; or benzine 1 ounce, soap 2 ounces, and water 1 pint.

The above diluted preparation is said to be death to insects that trouble plants. Be careful in the use of benzine, as it is very volatile, and its vapors are very inflammable. Benzine sprinkled upon clothes infested with moths will destroy every moth in a short time.

To Prevent Chafing.

During hot weather active persons of full habit are inclined to chafe. This may be cured or prevented by the use, once or twice a day—at rising and retiring—with the following :

Dissolve a lump of alum as large as a walnut in half a pint of warm water. When cold apply with a soft linen or cotton cloth to the parts affected.

Camphor and its Uses.

SPIRITS OF CAMPHOR.—Two ounces of camphor dissolved in alcohol forms what is known as spirits of camphor. It is used as an external application for sprains, local pains and stiches. It is applied by rubbing with the hand the painful part. To secure the full benefit of the application, the part

should be afterwards covered with flannel of suitable size, more or less wetted with the spirits, and the whole covered with oiled silk to restrain evaporation.

CAMPHORATED OIL.—This is another camphor liniment, the proportions being the same as in the preceding formula, substituting olive oil for the alcohol, and exposing the materials to a moderate heat. As an external stimulant application it is even more powerful than the spirits; and to obtain its full influence, the part to be treated should also be covered with flannel and oiled silk. It forms a valuable liniment in chronic rheumatism, and other painful affections, and is specially valuable as a counter irritant in sore and inflamed throats, and diseased bowels. Camphor constitutes the basis of a large number of valuable liniments.

CAMPHOR LINIMENT.—In case of hooping cough and some bronchial affections, the following liniment may be used with good effect; rubbing the chest and along the spine with the liniment:

Spirits of camphor, 2 parts; laudanum, $\frac{1}{2}$ a pint; spirits of turpentine, 1 part; castile soap in powder, finely divided, $\frac{1}{2}$ an ounce; alcohol 3 parts. Digest the whole together for 3 days, and strain through linen. This liniment should be gently warmed before using.

CAMPHORATED LINIMENT.—The following is a powerful liniment for old rheumatic pains, especially when affecting the loins,

Camphorated oil and spirits of turpentine, of each 2 parts; water of hartshorn, 1 part; laudanum, 1 part. To be well shaken together.

CAMPBOR EMBROCATION.—A very efficient liniment or embrocation, serviceable in chronic painful affections, may be made as follows:

Take of camphor, 1 ounce; cayenne pepper in powder, 2 spoonfuls; alcohol 1 pint. The whole to be digested with moderate heat for ten days; then filtered. It is an active rubifacient; and, after a slight friction with it, it produces a grateful thrilling sensation of heat in the pained part, which is rapidly relieved.

Green Mountain Plaster.

The following is the well known and justly popular Green Mountain Plaster, for rheumatic pains or weakness in the side, back or shoulders, or any place where pain may locate itself:

Take rosin 5 pounds, Burgundy pitch, mutton tallow and beeswax, each 4 ounces, Venice turpentine, oil of red cedar, oil of hemlock, oil of origanum and balsam of fir, each 1 ounce, oil of wormwood $\frac{1}{2}$ ounce, verdigris 1 ounce finely pulverized. Melt the first articles together, and add the oils, having rubbed the verdigris up with a little of the oils, and put it in with the other articles; stirring well. Pour the whole into cold water and work it like wax until cool enough to roll.

Spread upon soft leather and apply to the parts affected for rheumatism or weakness; letting it remain as long as it will adhere. For corns spread the salve upon cloth and apply to the corn, and let it remain until cured. Where the skin is broken, as in cuts, bruises, abrasions, ulcers and old sores, make the salve without the verdigris, spreading it upon cloth and applying as a sticking plaster.

Conklin's Celebrated Salve.

A salve made after the following formula has long been in use, and has performed wonders in the way of cures. It is used for rheumatism, rheumatic pains, pain in the sides, pain in the back, shoulders, etc.:

Take rosin 4 pounds, Burgundy pitch, white pine turpentine and mutton tallow, each four ounces, camphor gum and balsam of fir, each $\frac{1}{4}$ ounce, sweet oil $\frac{1}{2}$ ounce, alcohol $\frac{1}{2}$ pint. Melt and mix thoroughly and use as other salves.

British Oil.

Almost everybody has bought and used "British Oil" for cuts, bruises, swellings, and sores of every description on persons, horses and cattle. The following is the formula for its preparation :

Take oil of turpentine 8 ounces, linseed oil 8 ounces, oil of amber 4 ounces, oil of juniper 4 ounces, Barbadoes tar 3 ounces, sea oil 1 ounce. Mix thoroughly and it is ready for use.

Harlaem Oil.

This is another old but very efficient preparation for strengthening the stomach, kidneys, liver and lungs. It is good in cases of asthma, cough, shortness of breath, inward or outward sores, worm dropsy, gravel, palpitation of the heart, giddiness, headache, etc., by taking inwardly. It is equally good for ulcers, malignant sores, cankers, etc., and for anointing externally, and wetting linen with it and applying it to burns. It has been sold for over 100 years. The following is the formula for making it :

Take roll brimstone $\frac{1}{4}$ pound, gum ammoniac 1 ounce, gum myrrh 1 ounce; pulverize together and melt over a slow fire, and stir until it becomes brown; then add olive oil 1 pint, spirits of turpentine 1 pint. Dose 5 to 10 drops 3 times a day. Great care should be taken in mixing the ingredients, not to have them too hot, as it might take fire.

Another.

Here is another preparation that has been sold under the name of "Harlem Oil." The preparation differs a little from the above, though it may be just as good. It is used for the same maladies :

Take flowers of sulphur 2 ounces, oil of amber 2 ounces, linseed oil 1 pound. Boil the sulphur in the linseed oil and add the oil of amber. To this add sufficient spirits of turpentine to reduce

the whole to the consistence of thin molasses. Dose—15 to 25 drops morning and night. Dose for a child is one drop for each year of its age.

Gold-Colored Lacker.

Lackers of various colors are used upon polished metals for improving their appearance and to prevent rust. The following makes a deep gold-colored lacker, that imparts a beautiful appearance to tin or other metal :

Seed-lac 3 ounces, turmeric 1 ounce, dragon's blood $\frac{1}{4}$ ounce, alcohol 1 pint; digest for a week, frequently shaking, decant and filter.

If yellow is required, use turmeric, aloes, saffron, or gamboge ; or red use annatto or dragon's blood to color. Turmeric, gamboge and dragon's blood, generally afford a sufficient range of colors.

ANOTHER.—Alcohol $\frac{1}{2}$ pint, gum shellac 1 ounce, turmeric $\frac{1}{2}$ ounce, red-sanders $\frac{1}{4}$ ounce. Put all together in a flask and set in a warm place for 24 hours, shaking frequently, then strain off and bottle for use.

For different colors use articles mentioned above.

Japan for Tin.

The following ingredients will produce a transparent varnish for tin, that may be colored to any desired shade afterward :

Take balsam of fir 2 ounces, balsam of tolu 2 ounces, acetate of lead 2 ounces, gum sandarach 1 pound, and linseed oil $\frac{1}{2}$ pint.—Put all into a kettle over a slow fire at first, and increase until all are melted, then take from the fire and when a little cool stir in spirits of turpentine 2 quarts, and strain through a fine cloth and is ready for use.

The above should be applied with a brush, but it will be a colorless varnish. To give it any color desired, add the following :

For yellow take 1 ounce of curcuma root pulverized, and stir into a pint of the above until the color pleases you, then let stand a few hours and strain.

For blue take 1 ounce of indigo and Prussian blue, pulverize

them and mix with 1 pint of spirits of turpentine, and strain.—Take 1 pint of the varnish and add to it of this mixture until the color suits.

For green mix equal parts of the yellow and blue mixtures and add to the varnish as may be needed to give it the desired color.

For red, to $\frac{1}{4}$ a pint of spirits of turpentine add $\frac{1}{2}$ ounce cochineal; let it stand 12 to 15 hours and strain. Add of this to the varnish until the desired color is obtained.

Bronzing.

Various articles such as iron, wood, plaster busts &c., may be bronzed, and made to look almost as well as the metal itself by the following cheap process :

Take a black paint and put in a little chrome yellow, only enough to give it a dark green shade. Apply a coat of this to the article to be bronzed ; when dry give it a coat of varnish, and when the varnish is partly dry sprinkle on bronze by dipping a velvet cloth into it and then shaking it upon the varnish ; when dry give it another coat of varnish and it is complete.

Substitute for Pharaoh's Serpents.

Pharaoh's Serpents, or serpents eggs, is a scientific toy that has been very popular for the last year or two, but owing to the component parts being so difficult to procure, it has not come into general use. The original "serpents eggs" are made of sulphocyanide of mercury, an article difficult to make, and a hard matter to obtain. The following is a cheap substitute that is almost equal to the original toy, without its objectionable features :

Take 1 part of flour sulphur, and 6 parts of cyanide of mercury : rub the sulphur in a mortar with the cyanide of mercury to a very fine powder (the finer the better), then make a cone of tin foil and pack the powder into it rather loosely, leaving sufficient room at its bottom to close it. If tin foil is not convenient, moisten the powder and form a cone of the same, as pastilles are formed—place in the sun or near a fire until sufficiently dry.

To make a Beautiful Hearth-Rug.

We have seen some beautiful hearth rugs made in the following manner. All that is wanted is a little application, with a moderate amount of skill, to make a very ornamental rug. We saw two rugs once, at the Fair of the Michigan State Agricultural Society, that took the 1st and 2d premiums, made as follows :

Procure a coffee sack, tack it tightly on a frame of the size you wish your rug. Get a blacksmith to make you a crochet-needle about the size of a husking peg, tapering rather more. With charcoal and rule lay out on the sack the figure you wish for your rug. Gather all the old woollen rags such as are too much worn for carpet, thrumbs, bits of wool, etc. Tear these in strips, and with the hook in the right hand, hold the strip beneath with the left, thrust the hook through the meshes of the sack, catch the rag and pull it through about a half inch, then through again as near to the first as possible. By sorting the different colors and following the patterns, a very beautiful article can be made. After it is all filled up in this way, take a pair of sheep shears or common scissors, large size, and shear it all off to an even surface.—Old dresses are the best ; heavy cloth will not work in well.

An Impromptu Ice Pitcher.

The following simple plan may be adopted to preserve ice in a common pitcher. It may be prepared at any time in a few minutes at no cost and very little trouble. You will be astonished at its effect—at the length of time it will keep and the water remain cold after the ice has melted :

Place between two sheets of paper (newspaper will answer, thick brown is better) a layer of cotton batting, about half an inch in thickness; fasten the ends of paper and batting together, forming a circle ; then sew or paste a crown over one end, making a box the shape of a stove pipe hat, minus the rim. Place this over an ordinary pitcher filled with ice-water—making it deep enough to rest on the table so as to exclude the air.

To Measure a Crib of Corn.

It frequently happens that you wish to sell a crib of corn in the ear, without going to the trouble of

measuring it with a half bushel. A very nearly correct estimate of the contents of a crib may be made as follows :

Level the corn in the crib, measure the length, breadth and height which it occupies ; multiply these together, and this product by 0.4 (the decimal 4); this will give the amount in shelled corn—"supposing the bushel of ears will produce but a half bushel of grains." If the above product be multiplied by 0.8 we will have the actual contents of corn in the ear. Ears that are very productive will yield more than half ; for this proper allowance is to be made.

To Measure Hay in the Mow.

The following rule will be found near enough correct for all practical purposes. For a mow well pressed, it takes 600 to 700 cubic feet for a ton. If pressed very hard, say 600 feet. Take a mow 18 by 30, and 12 feet deep and we have the following formula.

$$18 \times 30 \times 12 = 6480 \div 600 = 10 \text{ } 48 \text{ } 60 \text{ tons.}$$

The rule is, multiply the length of the mow by the breadth, then by the depth, and divide by 600, if the mow is deep and hard pressed, or by 700 if not very deep, and not pressed beyond its own weight. Of hay not well settled in the mow, it will take 1,000 cubic feet to a ton.

To Extinguish a Burning Chimney.

A chimney or stove pipe frequently takes fire, (or the soot therein takes fire which amounts to the same thing,) endangering the house, and as a general thing you wait to see what comes of it. The following plan is always feasible and effectual :

Put a tablespoonful of flowers of sulphur in the stove and immediately close the draft. The sulphuric acid gas disengaged by the combustion of the sulphur will not support combustion, and consequently extinguishes the burning chimney or stove pipe.

To Cure Lamb Skins.

The various purposes to which lamb's wool is applied makes a really good method of tanning or curing the skins valuable. The following method we have tried and know it to be good :

As soon as the skin is taken from the animal, stretch it tightly on a board, flesh side out; then before it begins to dry, apply an equal mixture of fine salt and alum, thoroughly pulverized together, until the skin is slightly whitened by the mixture. In a few weeks take them and thoroughly wash them in warm soap suds, let them dry moderately, and just before they are fully dry, rub them soft with the hands. After rubbing they are soft and pliable as a kid glove, and will continue so.

Tanning Fur Skins.

Since the price of furs has become so perfectly fabulous, people whose purses have a bottom that is sometimes reached at inconvenient seasons, will find it convenient to sometimes adopt a home made substitute. The following method for preparing skins with the fur on is recommended :

The skins cleaned of flesh are put in a liquid prepared thus ;— Upon 1 pound of hard wood ashes, pour 4 gallons hot soft water, let it stand for a few hours and strain out the liquor, then add 3 pounds of common salt, $\frac{1}{4}$ pound of alum, and 1 pound of sulphuric acid (oil of vitriol). The mixture is to be made in a wooden tub or similar vessel, and care should be exercised in handling the acid, that none come in contact with the person or clothing. The skins are placed in the liquid and allowed to remain there from 1 to 2 hours, when they are rinsed and hung out to dry. Before the skin is fairly dry it may be much improved by stretching and rubbing until dry.

To Prepare Kid Leather.

The preparation of kid leather for gloves is one of the branches of industry that many manufacturers of gloves should understand. Yolk of egg is largely used in the preparation of kid leather for this pur-

pose, to give it the requisite softness and elasticity. As a substitute for the yolks of eggs, the brains of certain animals are used, which in chemical nature, closely resemble the yolk of egg.

For this purpose the brain is mixed in hot water, passed through a sieve and then made into dough with flour, and the lye of wood ashes. The glove leather is also steeped for a short period in a weak solution of alum. The Indians of our forests employ the brains of deer and buffalo mixed with a weak lye of wood ashes, and after this they smoke the skins, the pyroligneous acid of the wood in the smoke accomplishes the same object as the alum used by the French skin dressers.

Indian prepared skins stand the action of water in a superior manner to the French kid. Furs dressed after the Indian method resist the attacks of insects. It is believed that the carbonic acid in the smoke is the preservative principle which renders the skins tanned by the Indians superior to those tanned with alum and sumach in the usual way.—The skins are rubbed with the mixture of the brains of animals and the lye, then dried in the open air. Three or four such applications are necessary before they are smoked in pits covered with the bark of trees.

Patent Leather.

The basis for glazed or what is called “enamelled leather,” is boiled linseed oil. The following is the process.

Boil 5 gallons of linseed oil with $4\frac{1}{2}$ pounds litharge (oxide of lead) and $4\frac{1}{2}$ pounds of sulphate of zinc or white lead, until the whole becomes like thick cream. Combine this mixture with powdered chalk, enough to make it of the proper consistency, and spread upon the leather and work into the pores with appropriate tools. Apply thus three thin coats, allowing each to dry

before the other is put on, and when the last is perfectly dry, rub down with pumice stone until it is quite smooth. Then apply two thin coats of the prepared oil without the chalk, but made black with ivory black, and thinned with turpentine, and let it dry. For a final coating apply linseed oil mixed with turpentine and colored with lamp black. Then dry the leather in an apartment in which the temperature is maintained at 134 to 170 deg. Fah.

To Tan Nets, Sails, &c.

The cloth of awnings and sails, also nets and cordage, may be prepared in the following simple manner to endure for a far greater length of time than is usual with such articles :

Take about 100 pounds of oak or hemlock bark and boil it in 90 gallons of water, until the quantity is reduced to 70 gallons; then take out the bark and steep the cloth, sails or cordage in the clear liquor for about 12 hours. Then take it out and dry it thoroughly in the atmosphere or in a warm room. The cloth should be completely covered with the tan liquor and lie loose in it, so as not to press the folds too closely together while boiling. Sail and awning cloth thus prepared will resist the action of damp for years in situations where unprepared cloth will decay in a few months.

Tortoise Shell Japan.

This varnish which constitutes the ground work for those beautiful tea boards which are so much admired, is prepared as follows :

Take linseed oil 1 gallon, umber $\frac{1}{2}$ pound, and boil them together until the oil becomes thick and brown; then strain through a cloth and boil again, until the composition is about the consistence of pitch, when it is fit for use. Clean well the vessel to be varnished or japanned, and then lay vermillion mixed with shellac varnish, or with drying oil diluted with good turpentine, very thinly on the places intended to imitate the clear parts of the tortoise shell. When the vermillion is dry, brush over the whole with the prepared umber varnish diluted to a due consistence with turpentine, and when it is set and firm, put into an oven and let it undergo a strong heat for some time. The work is all the better for being finished in an annealing oven.

Painting Japan Work.

The following is the process for painting on Japan work. A skillful hand joined with the requisite

taste may make some beautiful work after this style:

Temper the colors to be painted in oil in which has been dissolved $\frac{1}{4}$ its weight of gum sanderach or mastic; then dilute with turpentine so that the colors may be laid on thin and evenly. In some instances it does well to put on water colors on grounds of gold, which may be managed so as to make the work appear as if it were embossed. Prepare the water colors with isinglass size mixed with honey or sugar candy. These colors when laid on must receive a number of upper coats of the umber varnish spoken of in the previous recipe.

To Enamel Cast Iron Utensils.

By the following method any cast iron utensils or articles for cooking or other purposes may be coated with a fine and durable enamel. The article to be enamelled must be scoured bright with sand and dilute sulphuric acid, then dried and the enamel paste put on with a brush, or poured on the surface and the excess dripped off:

Take 9 parts red lead, 6 parts flint glass, 2 parts purified pearlash, 2 parts purified saltpetre, and 1 part borax; reduce to a fine powder and grind all together; put all in a large crucible and melt until a clear glass is obtained. Grind this glass with water and cover the vessel to be enamelled with a coating, and then heat in a muffle in a furnace. This will melt in a very short time with the furnace at a good heat, and the cast iron vessel will be covered with a very fine black enamel of shining appearance.

WHITE ENAMEL.—Take 12 parts flint glass, 4 parts pearlash, 4 parts saltpetre and 2 parts borax and three parts oxide of tin, calcined with common salt. Treat this the same as above and you will have a fine, white enamel. In each case dry the paste slowly in the air, and bake the article in a hot oven until the paste fuses. The heat should be raised gradually to the melting point.

To Silver with Powdered Tin.

The following gilding or silvering is often used for covering wood, leather, iron or other articles in constant use. It is very ornamental.

Melt a quantity of pure tin, pour into a box convenient for the purpose and shake violently. The metal will assume when cold, the form of a very fine, gray powder. Sift this to separate any coarse particles, then mix with melted glue, and it is ready for

use. To apply, thin with water to the consistency of thin cream, and lay on with a soft brush, like paint. When dry, it will appear like a coat of gray water color. Go over it with an agate burnisher and it exhibits a bright surface of polished tin. A coating of white or gold colored varnish or lacker is immediately laid over it, according as it may be intended to imitate silvering or gilding. If the glue is too strong, the burnisher has no effect, and if too weak, the tin crumbles off under the burnisher.

To Tin Cast Iron Articles.

Many articles, such as bridle bits, small nails, &c., are manufactured of tinned cast iron. The following is the process of tinning such articles as saucepans, goblets, and other hollow iron ware on their inner surfaces :

First scour the article bright with sand and dilute sulphuric or muriatic acid ; then wash thoroughly in soft water and dry. Then place them over a fire and heat them then pour in grain tin, and move the vessel so as to roll the molten tin over the surface. Add some powdered rosin to prevent oxide forming on the surface of the iron. Copper or brass hollow vessels may be tinned in the same way.

How to Have Dry Feet.

There is probably no one condition so absolutely essential to health as warm, dry feet. And this fact is so generally appreciated by the better informed portion of the community, that various expedients have been devised to ensure that condition, and keep the dampness from the soles of the feet. Some advise that a piece of sail cloth or other woven material, should be cut the shape of the sole, dipped in melted pitch or tar, and when cooled, placed between the layers of the shoe's sole and well sewed. If this is carefully done it is impossible for any dampness to penetrate to the soles of the feet by simply walk-

ing on damp ground ; but in walking in wet grass or the slish of snow deep enough to reach the upper leather, this device is no protection.

Another means of rendering the soles of shoes impervious to dampness, and to prevent their squeaking, is to set them in melted tallow deep enough to merely cover the soles, and let them remain a week ; if it is in a mixture of equal parts of beeswax and tallow it is still the better.

Another method to make the soles impervious to water, and to last much longer, is to apply a coat of gum copal varnish, and as it dries another, and repeat the operation until the pores of the leather are filled, and the surface shines like polished mahogany.

ANOTHER PREPARATION.—The soles of shoes may be made impervious to water by rubbing the following mixture into the leather until it is thoroughly saturated.

Take one pint boiled linseed oil, half a pound of mutton suet, 6 ounces of pure beeswax, 4 ounces of rosin. Melt these over a slow fire, stirring well, and when the shoes are new, warm them and the mixture also, and use

FOR BOTH SOLES AND UPPERS.—Melt together 1 pound each of rosin and tallow, and apply while hot to both soles and upper leather, with a painter's brush. If it is desired that the boots should take a polish immediately, dissolve an ounce of beeswax in a teaspoonful of turpentine and add a teaspoonful of lamp black, a day or two after the boots have been treated with the rosin and tallow, rub over them this wax and turpentine, away from the fire. Thus the exterior will have a coat of wax alone, and will have a bright polish. Tallow and grease become rancid and rot the stitching, and the leather also ; while the rosin mixture preserves both.

ANOTHER.—Take 1 pint linseed oil, $\frac{1}{4}$ pint spirits of turpentine or camphor, $\frac{1}{4}$ pound Burgundy pitch ; melt the whole together

with a gentle heat; warm it when it is to be used, and rub it into the leather before the fire, or in the sun.

Or, melt together beeswax and mutton suet, half and half, and rub it in where the stitches are.

TO ATTACH GUTTA PERCHA SOLES.—Gutta percha soles are preferred by some. They may be attached to any boot or shoe in the following manner:

Dry the old sole, roughen it well with a rasp, and rub on with the finger a thin, warm solution of gutta percha; dry it, hold it to the fire, and then rub on a coat of a thicker solution. Take the gutta percha sole, soften it in hot water, wipe it, and hold both sole and shoe to the fire until warm; lay the sole on gradually, beginning at the toe. In half an hour pare it neatly with a knife.

It must be remembered that if you make the upper leather of a shoe water-tight, it is rendered measurably air tight, and this occasions dampness on the inside, creating ill odors and coldness, while any kind of oily substance must not only rot the material but cause a noisome smell.

ANOTHER WAY TO MAKE SOLES WATER PROOF.—Take new boots before they have been worn, and hold the soles to the fire until they are well warmed; then warm a little tar in a tin cup and apply it with a swab to the soles of shoes, but not hot enough to burn the leather, then let it be well dried in before the fire. This will never work out while warming the feet; but this tar should be applied the first of each month until May, if the boots are worn much in the wet. This tar penetrates the sole to the eighth of an inch, and renders it almost as hard as horn. Grease of any kind will soften the leather and make it more porous. Without this tar application, the first wetting of the soles will contract them and make them fit not so well, sometimes making them too small altogether.

Varnish for Shoes.

It is a bad plan to grease the upper leather of shoes for the purpose of keeping them soft; it rots the leather and makes it admit dampness more readily. Make a varnish as follows, and you will find it much more beneficial to the leather:

Put half a pound of gum shellac, broken up in small pieces, in a quart bottle or jug, cover it with alcohol, cork it tight and put it on a shelf in a warm place; shake it well several times a day, then add a piece of gum camphor as large as a hen's egg; shake it well and in a few hours shake it again and add one ounce of lamp black; if the alcohol is good it will be dissolved in three days; then shake and use. If it gets too thick, add alcohol—pour out two or three teaspoonfuls in a saucer, and apply it with a small paint brush. If the materials were all good, it will dry in about five minutes, and will be removed only by wearing it off, giving a gloss almost equal to patent leather.

The advantages of this preparation above others, is, that it does not strike into the leather and make it hard, but remains on the surface and yet excludes the water, almost perfectly. This same preparation is admirable for harness, and does not soil when touched, as lampblack mixtures do.

If boots are treated as above, and just before going out of doors the stockings are removed, and both feet and stockings are well dried before the fire, the feet will feel comfortably warm for several hours; it is the moisture or steam about the feet which often makes them feel cold by the out-door air condensing them. No one should travel in winter with tight-fitting shoes; they arrest the circulation; this induces coldness, causing a general feeling of discomfort all over the body, even making the mind fretful and irritable. A woolen stocking will alone keep the feet warmer than the same stockings and a tight fitting pair of boots besides. If a person has a good circulation, the feet will get warm of themselves if the tight boots are removed. No one can go to bed with cold feet without doing themselves a positive

injury ; and it is always best in winter-time, even if the feet do not feel cold, at bed-time to draw off the stockings and hold the feet to the fire or stove, rubbing them meanwhile with the hand, until they are perfectly dry and comfortably warm in every part ; it is a pleasant operation of itself, and ought not to be dispensed with for a single night from October to May ; it is one of the best anodynes ; it allows a person to fall asleep in five minutes who, with cold feet, would have remained awake for half an hour or more, and even then the sleep will be unrefreshing and dreamy. As cold feet induces a number of diseases, aggravates others, and delays the cure of all, it is worth all the trouble one can take, if thereby, even in the course of months, the delightful condition can be brought about wherein the feet are in such a natural and healthy state, that the mind is never attracted towards them unpleasantly.

Tight Shoes

Interfere with the pleasure of locomotion, cause corns, and even rheumatic gout ; hence it is worth while to adopt the following advice :

Just put on two pairs of thick stockings before the measure is taken, or before fitting your feet with ready made shoes ; then when you get home pull off both pair, put on one thin pair, wear them for a few days and then put on thicker. This simple expedient will prevent an incalculable amount of discomfort, irritation and loss in one year.

CLEANING SHOES.—By the following method, boots and shoes may be cleaned easily, harmlessly,

and well, without scarcely soiling your fingers, and save a great deal of extra brushing.

Scrape off the mud or wet dirt with an old spoon handle, or, what is better, a wooden knife; then, with a soft, damp rag or sponge, remove what the knife failed to; then set them back from the fire for five or six hours, or more; they will then take a polish as easily as before they were wetted.

Boots and shoes for the winter should be large enough to admit of cork soles, which, if taken out every night and dried well, will keep the feet warm all the time, without which condition no person can possibly have good health, while there are many whose only obstacle to good health is cold feet.

To Preserve Potatoes from Sprouting.

There are various methods recommended for keeping potatoes and preventing their sprouting or becoming unfit for table use in the spring. The following is the Scotch method, recommended in *Hall's Journal of Health*. It is said that "mealy" potatoes may be had all summer from the previous year's growth.

To a pint of water add an ounce of liquid ammonia (hartshorn), or in that proportion; let the potatoes be immersed in this mixture four or five days; dry them. Their substance is thus consolidated, and much of their moisture extracted without the slightest injury for all table qualities, but their vegetative power is forever destroyed. If spread out after immersion, so as to be well dried, they will keep good for ten months.

Baked potatoes are easily digested, requiring only two hours and a half, but one hour longer if boiled. The sprouts of potatoes uncovered with earth contain solanum, a powerful poison, the potato becoming green, and is then unfit for even animals. To have

mealy potatoes for the table, boil them until the fork easily penetrates; pour off all the water; cover the vessel with a cloth near the fire until "steamed dry."

We will add that in no way is a potato so excellent as when *roasted*, so that while it is thoroughly cooked the skin will not be too hard to be eaten. — Many people—a large majority—merely eat the inside of a potato, and reject the outside, or skin, which is really the best part of it, and possesses the finest flavor.

ANOTHER PLAN.—Put the potatoes in the cellar in boxes, barrels or bins, and completely cover with old carpet, rags, or any substance that will completely exclude the light. If this is properly done, there will be no sprouting.

ANOTHER WAY TO HAVE MEALY POTATOES.—Sprinkle the bottom of the potato bin with lime, and put in about six inches deep of potatoes, then sprinkle with lime as before. Put in another layer of potatoes about six inches deep and sprinkle again with lime, and continue the process until the bin is filled. One bushel of lime will answer for forty bushels of potatoes, though more will not hurt them. The lime rather improves the flavor of the potatoes.

ANOTHER METHOD.—This we will not warrant, though we have the assurance of those who have tried it, that it is infallible.

Fill a basket of potatoes and dip them into a kettle of boiling water, and let them remain two or three minutes. Repeat the operation until you have thus cured all you want for spring use. The boiling water kills the germ so they will not sprout and become soft. Dry them before packing away.

ONE MORE METHOD.—Try the following:

Put a quantity of powdered charcoal in the bottom of the bin. After putting in potatoes to the depth of about a foot, sprinkle in more powdered charcoal and thus fill up the bin. The charcoal will preserve their flavor and prevent the sprouts from starting in the spring.

Sweet Potatoes---to Transplant.

The very general production of this esculent within the last few years, will be a sufficient excuse for introducing here, short directions for transplanting, cultivating and preserving them. It is better to prepare your ground immediately before the planting, as the freshly prepared ground is much looser, and is therefore, more suitable to receive the plants.

Having got the ground, together with your plants all ready, no matter how dry the weather, commence about the middle of the afternoon, having tubs or barrels of water conveniently situated, and use about a teacup full of water to each plant. The ground being loose, the four fingers of the right hand are passed down about their length into the earth and the dirt pulled up so as to make a hole large enough for a cup of water. With your left hand carefully set your plant down as it should stand. Now let some person pour on the cup of water, which will cause the fibrous roots to swim and straighten out, and assume their natural position. Now quickly let the dirt in your right hand be conducted around your plant in as loose manner as possible, leaving the top of the plant properly out of the ground. No packing is desirable in this case. By using this method we never have to wait for a suitable season, but get the plants ready as soon as possible.

Thus set, they commence growing right along, and live and do better than if planted in any other way, unless it is a very favorable season. Much time is saved, and we have a much larger and more abundant crop. If the water is slightly manured it will be still better.

To Keep Sweet Potatoes.

To keep the sweet potatoe for use through the winter requires much care. One great requisite is, to have the potatoes gathered before they are injured by frost or by remaining in cold soil after the vines are killed. Another very important item is to have them carefully handled. If they are dry when brought from the field they may be put up the following day, if moist they should be allowed to dry twenty-four hours before putting up. If muddy and wet, a longer time is needed. Throw out all cut and bruised ones. The potatoes may be placed in boxes or bins of any convenient size, only that they must not contain potatoes more

than sixteen inches in depth, and if placed one above another, must have an air space of at least two inches between the bottom of one and the top of another. They should be raised from the floor in the bottom of the box, then fill half full of potatoes, then shovel in sand until the crevices are well filled, then fill up with potatoes and finish with sand, having an inch of sand above the top of the potatoes. The sand should be dry, dusty, and screened if possible, so that it will run well. The best time to secure the sand is in the months of August and September. Dry it on a platform of boards in the sun, and store it away in a dry place.—It will require about one-third as much bulk of sand as there is of potatoes to be put up. To keep well, the sweet potato needs an even temperature.

To Preserve Grapes.

Pick the grapes carefully, without bruising, and pack them in tight boxes. Put in a layer of raw cotton, then a layer of grapes, then another layer of cotton, and so on, until the box is full.—When carefully prepared in this way they may be kept all winter.

French Method.

It is said that the French, who ought to know all about grapes, adopt the following method of preserving grapes the year round :

Pick the bunches just before they are thoroughly ripe, and dip them in lime water having the consistency of thin cream. The lime coating keeps out the air and checks any tendency to decay. When grapes thus prepared are wanted for the table, they are placed for a moment in hot water, and the lime will be removed.

To Keep Apples.

Apples may be kept for winter and spring use as follows :

Put your apples in casks or bins in layers well covered with dry sand, each layer being covered. This preserves them from air, from moisture and from frost; it prevents their perishing by their own perspiration, their moisture being absorbed by the sand; at the same time it preserves the flavor of the apples, and prevents their wilting. Apples may be kept in this manner sound and fresh until they grow again. Any kind of sand will do, but it must be perfectly dry.

If apples are immersed in any kind of grain they will keep good all the year round, and the grain will not in any way be the worse for it. This need not in-

volve any preparation or expense, as the apples may be put into a corn or oat bin, and corn or oats intended for feed may be kept this way as well as any other.

To Pack Fruits for Long Distances.

A friend who has been in the small fruit growing business for some time, furnishes us with his method of packing fresh fruits of various kinds, to send distances varying from 50 to 500 miles. He says: "I have invariably packed from 60 to 80 bunches of grapes, and 50 or 60 dozens of peaches or apricots in one box, and received letters from persons who said they had arrived as safe as if they had been picked from the trees that morning. The following is his method:

Take a box in size according to the quantity to be sent. Put a layer of sweet bran in the bottom, wrap soft paper around each bunch of grapes, by holding it over the sheet of paper and carefully bringing the four corners up to the stem and giving them a slight twist; then lay the bunch on its side in the box, and so on until the first layer is finished. Then fill the whole over with bran, and give the box a gentle shake as you proceed. Begin the second layer as the first, and go on until the box is completed. Thus with neat hands the bloom is preserved, and may be sent to any distance; but with clumsy hands, quite the contrary, and often an entire failure, as the putting in and taking out of the box are the most important points to be observed.

The Time to Cut Timber.

Timber should always be cut between the 1st of August and the 1st of December, to make it last, and to keep it from powder post and the borer. Timber cut at this season of the year will be very much sounder and far more durable than that which is cut at any other season. Try it and see.

To Prevent Fence Posts from Decaying.

Several methods are given for preventing fence posts from rotting in the ground. Always set the end of the post towards the top of the tree into the ground. One way is to char the end of the post as far as it goes into the ground, by burning. It is said this will make them last ten times as long as they would without such preparation. - Another method is to saturate the end of the post with tar as far as they go into the ground. The following is the method of preparing them :

Procure a sheet iron tank, of the same depth you wish the posts to be tarred, and two and a half or three feet in diameter. Have this set on a common stove and set it full of posts, with the top end downward. Fill up the tank with tar and boil for an hour.

To Make Hens Lay in the Winter.

There are various methods advised to make hens lay in winter, each probably having more or less virtue. One is to feed them occasionally with fresh meat, some say raw, and others cooked. The following is the plan recommended by one of our farmer friends, and which has been tried successfully :

Raise a sufficient quantity of sunflowers for the hens to feed upon the seeds all the winter, and you will have plenty of eggs. - The best way to raise them is to plant with potatoes, then you can also plant Lima beans, which will run up the stalks and save the expense of polling. The sunflower will shade the potatoes, and make them grow better and be much sweeter, so that three crops can be raised off one piece of ground. Cut your sunflowers up, when ripe, at the bottom of the stalk, and set them up on the ends, with their heads close together, near your fowl-yard, where the hens can run under between the stalks and pick up the seeds as they fall down.

To Tell a Horse's Age by His Teeth.

It is frequently convenient to be able to determine approximately the age of a horse for yourself. An expert frequently does this at a glance at the animal's mouth. The following is the only rule we are aware of for determining the age of a horse by his teeth :

At birth, only the two nippers or middle incisors appear.

At one year old, the incisors are all visible on the first or milk set.

Below three years, the permanent nippers have come through.

At four years old, the permanent dividers next to the nippers are out.

At five years of age the horse has forty—twenty-four molar or jaw teeth, twelve incisors or front teeth, and four tusks or canine teeth, between the molars and incisors, but usually wanting in the mare.

At six, the hollow under the nippers, called the mark, has disappeared from the nippers, and diminished in the dividers.

At seven, the mark has disappeared from the dividers, and the next teeth, or corners, are level, though showing the mark.

At eight, the mark is gone from the corners, and the horse is said to be aged.

After this time, indeed, good authorities say after five years, the age of a horse can only be conjectured. But the teeth gradually change their *form*, the incisors becoming round, oval, and then triangular.—Dealers sometimes *bishop* the teeth of old horses ; that is, scoop them out to imitate the mark, but this can be known by the absence of the white edge of enamel which always surrounds the real mark, by the shape of the teeth, and other marks of age about the animal.

When a Horse is Unsound.

It frequently becomes necessary to determine whether a horse is unsound or not, or whether he is

vicious or not. In such cases it is well to have some guide to know what constitutes unsoundness, or viciousness in the eye of the law. Any of the following defects constitute unsoundness in a horse :

Lameness, of all kinds and degrees. Diseases of any of the internal organs. Cough of all kinds as long as it exists. Colds or catarrhs, while they last. Roaring, broken wind, thick wind, grease, mange, farcy and glanders, mergrims or staggers, founder, convex feet, contracted feet, spavins and ringbones, enlargement of the sinews or ligaments, cataracts and other defects of the eye, impairing sight.

The following may or may not occasion unsoundness, according to the state or degree in which they exist : Corns, splints, thrushes, bog-spavins, thorough-pins, wind-galls, crib-biting.—Curbs are unsoundness when it cannot be remedied by care and skill. Quidding, when a confirmed habit, injures the soundness of a horse.

Defects, called blemishes, are : Scars from broken knees, capped hocks, splints, bog-spavins, and thorough-pins ; loss of hair, from blisters or scars, enlargement from blows or cutting, and specks or streaks on the corners of the eye.

Vices are : Restiveness, shying, bolting, running away, kicking, rearing, weaving or moving the head from side to side, string-halt, quidding, slipping the halter.

On Dyeing.

Dyeing is one of those domestic operations that every housekeeper occasionally has to resort to. It may as well be remarked here that in all operations in dyeing great neatness should be observed ; not that kind however observed by the lady who told the girl to give the water pail, that she was using in mopping the floor, “a cold water rinse” before she brought water for tea, because she “abhorred nastiness.” Everything to be dyed as well as all the vessels and utensils used should be perfectly clean. All articles to be dyed should be thoroughly washed and scoured with soap, and then thoroughly rinsed until the soap is entirely washed out.

The following information will be found useful in dyeing fabrics, as regards the colors they will take. If the material be

Black—it can only be dyed black, brown, dark green, dark crimson, dark claret, and dark olive.

Brown—can only be dyed black, dark brown, dark claret.

Dark Green—black, dark brown, dark green, dark claret, dark olive.

Light Green—dark green, black, dark brown, dark crimson, dark claret, dark olive.

Dark Crimson—black, brown, dark crimson, dark claret.

Light Crimson—will take the same as dark crimson.

Fawn—will take dark crimson, dark green, black, brown, dark claret.

Dark Blue—black, brown, dark crimson, dark green, dark claret, dark olive, dark blue.

Pale Blue—dark crimson, dark green, black, brown, claret, dark blue, dark olive, lavender, orange, yellow.

Olive—will dye brown, black, dark green, dark crimson, dark claret.

Lavender—black, brown, dark crimson, claret, lavender, olive, pink, dark green.

Pink—olive, dark blue, dark fawn

Rose—same as pink, also orange, scarlet, and giraffe.

Straw—primrose and yellow will dye almost any color required, as also will peach and giraffe.

Gray—will only dye, besides black and brown, dark green, dark claret, dark crimson dark fawn, and dark blue.

White silk, cotton and woollen goods can be dyed any color. As cotton, silk and wool all take dye differently, it is almost impossible to re-dye a fabric of mixed stuff any color except the dark ones named above. As appears from the above list, pale blue will re-dye better than any other color.

You get your materials all ready for a rag carpet, then you want rules to refer to, for preparing your colors. The following ten colors will make a beautiful carpet, and they will retain their brightness until the carpet is worn out. In these recipes use soft or rain water, and have the yarn thoroughly rinsed after dyeing.

MADDER RED FOR WOOLEN YARN.—For $2\frac{1}{2}$ pounds yarn, take $\frac{3}{4}$ pound alum in sufficient water to cover the yarn, and boil the yarn in the solution for 2 hours, and then rinse, wring and dry it. Boil bran with 2 gallons of water and strain, add the liquor to the madder, which has been soaked in strong vinegar, enough to wet it, add sufficient water to allow the mixture to cover the yarn and bring the whole to a scalding heat. Put the yarn into the dye and let it scald for half an hour without getting hot enough to simmer.

When the yarn is removed from the dye it may be made of a bright red by washing it in soap suds, or

it may be made crimson by dipping it in weak lye slightly warmed.

BLUE.—One ounce of pulverized indigo dissolved in six ounces of concentrated oil of vitriol makes what the druggists call sulphate of indigo, and what is known to the old fashioned dyers as “chymic.” If the indigo be good and the acid sufficiently strong, the solution may be made in a glass bottle. For fear of failure in both these particulars, it is as well to buy the sulphate of indigo ready made from the drug stores.

For 1 pound of yarn, dissolve $\frac{1}{4}$ pound alum in sufficient water to cover the yarn, add a little of the sulphate of indigo, put in the yarn, boil for a short time and rinse well. The depth of color may be graduated by using more or less sulphate of indigo.

DARK BROWN.—Into a vessel large enough to contain the yarn, put white-walnut bark enough to half fill it. Fill up the vessel with water and boil for an hour. Take out the bark and put in the yarn and boil. Remove the yarn and air it, and if not dark enough, dip it in lye, increasing the strength of the lye if a very dark shade is wanted. A reddish brown may be given by adding a handful of camwood to the above.

LIGHT BROWN.—Proceed as for dark brown, using white ash bark instead of walnut, and dip the yarn in strong lye. The yarn as it comes out of the dye, may be nearly white, but the lye will darken it, and if one immersion is not enough, dip it again. The lye will not injure the yarn if it be thoroughly rinsed afterwards.

CAMWOOD BROWN.—For 2 pounds of yarn, boil 1 pound of camwood in sufficient water to cover the yarn, until the color is extracted. Put in the yarn and boil until it has taken the color, then remove it, add to the liquor $\frac{1}{2}$ ounce oil of vitriol, and put in the yarn again and simmer. If not dark enough, add 1 or 2 ounces of blue vitriol and simmer until the desired shade is obtained.

PINK.—For 2 pounds yarn, take $\frac{3}{4}$ of an ounce of cochineal, $1\frac{1}{2}$ ounces cream of tartar and 3 ounces of chloride of tin. This last may be had at the drug stores under the name of muriate of tin, or tin mordant. Soak the cochineal in a quart of warm water, and add it to warm water enough to cover the yarn, add the cream of tartar and the chloride of tin, and boil until the desired color is obtained. Double the cochineal will make scarlet.

LILAC OR PURPLE.—For each pound of yarn dissolve $\frac{1}{2}$ pound of alum in sufficient water, and simmer the yarn for two or three hours. Make a dye of $\frac{1}{4}$ pound Nicaragua wood for each pound of yarn by boiling out the wood in sufficient water. Put the yarn from the alum water into this dye and boil from 15 to 20 minutes, remove and drain it, dip in strong lye and rinse well in cold water.

YELLOW.—Make a strong decoction of black-oak bark, enough to cover the yarn, and for each pound of yarn add $\frac{1}{4}$ pound of alum, and 1 ounce of chloride of tin. Boil until the proper color is produced.

ORANGE.—Proceed as for yellow, but add madder in sufficient quantity to produce an orange color. Or instead, for 1 pound of yarn take 1 ounce annotto, and $1\frac{1}{4}$ ounces pearlash. Slice the annotto into 4 quarts and dissolve the pearlash in an equal quantity, and mix the two liquids and boil. Put in the yarn and simmer 15 or 20 minutes, and wash it in strong soap suds as soon as it comes from the dye.

GREEN.—Prepare a yellow dye of black oak bark, as directed above, add gradually the sulphate of indigo, until the proper shade of green is produced, put in the yarn, stir well and let it boil.

A Permanent Blue.

The following process is said to produce a very fine, permanent blue.

Boil the cloth in a brass kettle for an hour, in a solution containing 5 parts of alum and 3 of tartar for every 32 parts of cloth. It is then to be thrown into warm water, previously mixed with a greater or less proportion of chemic blue, according to the shade the cloth is intended to receive. In this water it must be boiled till it has acquired the desired color.

Here is another blue that is highly recommended.

Take $1\frac{1}{4}$ ounces prussiate of potash, 2 ounces copperas, each dissolved in 4 gallons of rain water as warm as you can hold your hand in. Put your goods into the copperas water, and let stand 5 or 10 minutes; wring out. Then put 2 tablespoonfuls of the oil of vitriol into the prussiate of potash water, and let it stand a sufficient length of time to produce the desired color. Wring out without rinsing.

Blue Dye For Silks.

Take a $\frac{1}{2}$ pound oil of vitriol and turn it upon a $\frac{1}{2}$ ounce of Spanish indigo that has been reduced to a fine powder. Stir them well together, then add a lump of pearlash, the size of a pea—as soon as fermentation ceases, bottle it. It will be ready for use

For a green dye, use double the amount of indigo.

These dyes will not answer for cotton goods as the vitriol rots the threads.

To dye a pale color, put to each quart of soft, warm water that is to be used for the dye, ten drops of the above composition—if you wish a deeper color, more will be necessary. Put in the articles without crowding and let them remain in it till of good color. The dye stuff should be kept warm. Take the articles out without wringing; drain as much of the dye out of them as possible, and then hang them to dry in a dry shady place. They should be dried quickly or they will not look well. When perfectly dry, wash them in luke warm suds to keep the vitriol from injuring the texture of the cloth. A little of the above composition mixed with yellow dye will make a lively, bright green.

Another Madder Red.

The following preparation will give a very fine madder red:

For each pound of cloth soak half a pound of madder in a brass kettle over night, with sufficient warm water to cover the cloth you intend to dye. Next morning put in two ounces of madder compound for every pound of madder. Wet your cloth and ring it out in clean water, then put it into the dye. Place the kettle over the fire and bring it slowly to a scalding heat, which will take about half an hour; keep at this heat half an hour if a light red is wanted, and longer if a dark one, the color depending on the time it remains in the dye. When you have obtained the color, rinse the cloth immediately in cold water.

A FINE SCARLET RED.—The following will produce a fine scarlet red, that will fairly make your eyes water with its brightness:

Bring to a boiling heat, in a brass kettle, sufficient soft water to cover the cloth you wish to dye; then add $1\frac{1}{2}$ ounces cream of tartar for every pound of cloth. Boil a minute or two, add 2 ounces lac dye and 1 ounce madder compound (both previously mixed in an earthen bowl,) boil five minutes; now wet the cloth in warm water, wring it out and put it in the dye; boil the whole nearly an hour; take the cloth out and rinse it in clear, cold water.

ANOTHER GREEN.—Here is another method of producing a deep green;

For every pound of cloth add $3\frac{1}{2}$ ounces of alum and 1 pound of fustic. Steep (not boil) till the strength is out; soak the cloth till it acquires a good yellow, then remove the chips, and add the chemic blue by degrees till you have the desired color.

Here is another shade of green :

Make a dye of 1 pound of fustic, and sufficient water to cover 2 pounds of cloth or yarn. Let your articles for coloring remain in this dye for two hours. Wring out, and add to the dye a sufficient quantity of extract of indigo to make it the shade required. Let your cloth remain in twenty or thirty minutes.

Yellow Dyes.

Here are several methods for coloring yellow :

One-half pound sugar of lead dissolved in hot water ; $\frac{1}{4}$ pound bi-chromate of potash, dissolved in a vessel of wood, in cold water. Dip first in the lead water, then in the potash, until the color suits.

ANOTHER YELLOW.—The following will produce a fine yellow dye for five pounds of goods :

Take sugar of lead, 7 ounces and dissolve in water ; dip the goods two hours. Make a new dye with bi-chromate of potash 4 ounces ; dip until the color suits, then wring out and dry. If it is not sufficiently yellow, the operation may be repeated.

YELLOW FOR SILK.—For 1 pound of silk, take alum 3 ounces, sugar of lead $\frac{3}{4}$ of an ounce. Immerse the goods and let stand over night ; take out, drain, and make a new dye with fustic, 1 pound. Dip in this last until the desired color is obtained.

The yellow or green for wool works equally well on silk.

The following will produce a good buff color :

Boil equal parts of annatto and common potash in clear, soft water. When dissolved, take it from the fire ; when cool, put it in the goods, which, as we have before said, should be washed clean, and be free from spots ; set them on a moderate fire, where they will keep hot until the goods are of the shade you wish.

The following is for salmon and orange color :

Tie annatto in a bag, and soak it in warm, soft soap suds, till it becomes soft, so that you can squeeze enough of it through the bag to make the suds deep yellow ; put in the articles, boil them till of the shade you wish. There should be enough of the dye to cover the goods ; stir them while boiling to prevent them from spotting. Drain them out of the dye and dry them quickly in the shade ; when dry, wash them in soft soap suds. Goods dyed in this manner should never be rinsed in clear water.

Peach leaves, fustic and saffron all make a good straw or lemon color, according to the strength of the dye. They should be steeped in soft fair water, in an earthen or tin vessel, and then strained, and the dye set with alum and a little gum arabic dissolved in the dye if you wish to stiffen the article.

Sumac Colors.

The following are some of the coloring capacities of the well known shrub, sumac:

The bark boiled in soft water to which a solution of alum is added, produces a yellow.

The shoots and leaves, cut in September and dried, boiled in iron, and set with a very little copperas, produces drab and slate colors on cotton and wool, according to the quantity used.

The red berries or bobs prepared as the shoots and leaves, color a beautiful nutgall color.

BUTTERNUT BROWN.—Soak the bark in warm water several hours, then put in the woolen cloth along with the bark, and bring it slowly to a scalding heat, airing the cloth every half hour, until the strength of the bark is exhausted, but do not let it boil. You may temper the shade of the brown by the quantity of the bark used.

Red Dyes.

Madder makes a good durable red, but not a brilliant color. To make a dye of it, proceed as follows:

Allow for $\frac{1}{2}$ pound of the madder, 3 ounces of alum, and 1 ounce cream of tartar, and 6 gallons of water. This proportion of ingredients will answer for 7 pounds of goods. Heat half the water scalding hot in a clean brass kettle, then put in the alum and cream of tartar and let them dissolve. When the water boils, stir the alum and tartar up in it, put in the goods and let them boil a couple of hours; then rinse them in fair water; empty the kettle and put in three gallons of water and the madder; rub it fine in the water; then put in the goods, and set them where they will keep scalding hot for an hour without boiling, then increase the heat until they boil. Let them boil five minutes, then drain them out of the dye, and rinse them without wringing, in fair water, and hang them in the shade where they will dry.

Slate Color.

To dye a good slate color use the following:

Boil sugar-loaf paper with vinegar in an iron kettle. Put in alum to set the color. Tea grounds set with copperas make a good slate.

Black Dye.

The following will give a very fine black for either cotton, silk or woolen goods.

Take for each pound of goods that are to be dyed, 1 pound of logwood, soak over night in soft water, then boil an hour, and

strain the water in which it is boiled. For each pound of logwood, take 1 ounce blue vitriol, dissolve in luke-warm water sufficient to wet the goods. Dip the goods in; when saturated with it, and turn the whole into the logwood dye.

For cotton goods—set the vessel on the fire and let the goods boil ten or fifteen minutes, stirring them constantly to prevent their spotting. Take the goods out and drain them without wringing, and hang them in a dry shady place, where they will have the air. When dry, set the color, by putting them into scalding hot water that has salt in it, in the proportion of a teacupful to 3 gallons of water. Let the goods remain till cold, then hang them where they will dry, without wringing.

For silk or woollen goods,—go through the same process as above, only the goods must not be boiled in the dye-stuff, but should be kept at a scalding heat for 20 minutes. Set the color of silk goods with boiling hot soap suds—let them remain in it till cold. The color of woollen goods is set as above given for cotton goods.

ANOTHER BLACK.—The following will produce a black that will not fade by exposure to the sun, nor impart any of its color in fulling :

Take blue vitriol 5 ounces; boil it a few minutes, then dip the goods $\frac{3}{4}$ of an hour, airing often. Take out the goods and make a dye with 3 pounds logwood; boil $\frac{1}{2}$ an hour; dip $\frac{3}{4}$ of an hour and air the goods, then dip $\frac{3}{4}$ of an hour more. Wash in strong suds to set the color. The above proportions are calculated for 6 pounds of woollen goods.

TO COLOR WOOL BLACK.—For 10 pounds of wool boil together 4 ounces bi-chromate of potash and 3 ounces ground argal, and put in the wool. Stir well and let it remain in the dye 4 hours. Take out the wool and rinse slightly in clear water. Then make a dye by boiling $3\frac{1}{2}$ pounds logwood and 1 pint chamber lye 1 hour, and let the wool lie in all night. Wash in clear water.

GREEN.—A very desirable green may be secured in this way :

Boil together equal parts of yellow oak and hickory bark.—Add to the dye thus made extract of indigo, 1 tablespoonful at a time until you get the desired shade.

ANOTHER GREEN.—For each pound of goods, steep one pound of fustic and $3\frac{1}{2}$ ounces of alum, until the strength is out, and soak the goods in the mixture until a good yellow is obtained. Then after removing the chips add the extract of indigo, 1 tablespoonful at a time until the color suits.

A LIVELY AND BEAUTIFUL DRAB.—Light colored fabrics—cotton, wool, silk or linen—such as gloves, stockings &c., may be dyed a beautiful drab as follows :

To a pint of rain water add 6 or 8 grains of nitrate of silver ;—when it is dissolved stir it well, and immerse the perfectly clean fabric. Stir it well with a clean stick until it is perfectly and evenly saturated. When thoroughly soaked, wring out quickly with the hands, they being instantly washed. Dissolve $\frac{1}{4}$ ounce sulphuret of potassium in a pint of water, and saturate the goods with it evenly and well. Then wash in clear water and it is finished. For this dye glass vessels should be used.

SNUFF BROWN.—The following will make a dark permanent snuff brown for 5 pounds of cloth or wool :

Boil 1 pound camwood $\frac{1}{4}$ of an hour, then dip the goods $\frac{3}{4}$ of an hour. Take out the goods and add to the dye $2\frac{1}{2}$ pounds of fustic—boil 10 minutes and dip the goods again $\frac{3}{4}$ of an hour—then add 4 ounces copperas and 1 ounce blue vitriol, and dip again half an hour. If not dark enough add more copperas.

ANOTHER BLUE.—We have already given one or two recipes for a blue dye. Here is another that is quick and permanent. The following ingredients are for 2 pounds of goods :

Mix 5 ounces alum and 3 ounces cream tartar with water enough to cover the goods. Boil the goods in this for 1 hour ;—then throw the goods into warm water, which has more or less of the extract of indigo in it, according to the depth of color desired, and boil again until it suits, adding more of the blue if needed to give the desired shade.

To Color Stocking Yarn.

Housekeepers who love to have the finest colors for their home made hosiery as well as the best of everything generally, use the following dye for coloring stocking yarn between a purple and blue.—The following ingredients are for 5 pounds of yarn :

Dissolve 1 ounce bi-chromate of potash and 2 ounces alum, in water and bring it to a boil, putting in the yarn and boiling one

hour; then make another dye of $2\frac{1}{2}$ ounces logwood and boil the yarn 1 hour in it. The above process will be equally as good for silk. The more of the logwood extract used, the darker will be the shade.

SCARLET FOR YARN OR CLOTH.—Take cream of tartar $\frac{1}{2}$ ounce, cochineal well pulverized $\frac{1}{2}$ ounce, muriate of tin $2\frac{1}{2}$ ounces.—Boil together and then put in the goods; work them briskly for 10 or 15 minutes, after which boil an hour and a-half, stirring the goods slightly while boiling. Take out and wash in clear water and dry in the shade.

LAC RED.—We have already given several recipes for red dyes. Here is another that gives a very desirable shade:

Boil 10 ounces of argal a few minutes, then mix 1 pound of lac fine ground, with $1\frac{1}{4}$ pounds muriate of tin and let them stand 2 or 3 hours; add half of the lac to the argal dye and dip the goods for half an hour, then add the balance of the lac and dip again 1 hour; keep the dye at a boiling heat until the last half hour when it may be allowed to cool off.

SILVER DRAB.—The following makes a very pretty color for silk or woollen goods, the ingredients being calculated for 5 pounds of goods:

Boil together 1 teaspoonful of logwood and the same amount of alum, then dip the goods one hour. If the shade is not dark enough add equal quantities of alum and logwood, until suited.

TO MAKE CHEMIC.—The following is the rule for making good “chemic” or extract of indigo, which druggists generally keep on hand. It may be made and kept bottled for use, when wanted, as it improves by standing:

Stir into $\frac{1}{2}$ pound oil of vitriol, 2 ounces of finely ground indigo, and continue to stir the mixture for half an hour. Cover it and let it stand for 2 or 3 days, stirring 3 or 4 times a day. Then to neutralize any excess of acid it may contain, stir in saleratus as long as it foams. Put into a glass vessel and cork tight, and it is ready for use.

For Carpet Rags.

The following directions are more especially giv-

en in reference to carpet rags, which may in this way be changed from dark to light colors, at the option of the dyer, premising always that the rags have been washed clean :

For every 5 pounds of rags take muriate of tin $\frac{3}{4}$ of a pound, and mix with it $\frac{1}{2}$ pound lac. Dip the goods in this dye 2 hours, boiling half the time. This will give them a lac red. The same goods can be made a beautiful purple by adding a little logwood. Be careful and not get in too much.

Much beauty may be added to the carpet by taking white rags in the skein and tying and coloring them red, green and purple.

BLACK FOR COTTON GOODS.—Boil 3 pounds sumac wood and bark for half an hour, and then steep the goods in it for 12 hours, and dip in lime water half an hour. Add 8 ounces copperas to the sumac liquor and dip the goods another hour; then run them through the lime water again for 15 minutes. Now make another dye by boiling $2\frac{1}{2}$ pounds of logwood one hour, and dip the goods in it 3 hours; then add to the logwood dye 2 ounces of bichromate of potash, and dip one hour. Wash in clear cold water and dry in the shade. The above is calculated for 5 pounds of cloth.

SKY BLUE.—Boil 4 ounces of blue vitriol a few minutes, in sufficient water to dip 3 pounds of goods—dip the goods three hours, then pass them through strong lime water. This color may be changed to a beautiful brown by putting the goods through a solution of prussiate of potash.

GREEN FOR SILK.—A very handsome green may be given to silk with oak bark as follows :

Boil 8 ounces yellow oak bark for half an hour, then turn off the liquor, add to it 6 ounces of alum and let it stand until cold. Have the goods previously colored a light blue, washed and dried. Dip them in the alum and bark dye. If necessary to make the color take well, warm the dye a little. The above is for 1 pound of silk goods.

MULBERRY FOR SILK.—For 1 pound of goods dissolve 4 ounces alum in sufficient water, and boil the goods one hour. Wash out and dip for half an hour in another dye made by boiling together 1 ounce of Brazilwood and $\frac{1}{4}$ ounce of logwood. After dipping, add more Brazilwood and logwood in equal proportions until the desired shade is obtained.

LIGHT BLUE FOR SILK.—Dissolve $\frac{1}{2}$ a tablespoonful of alum in a teacupful of hot water and pour into a gallon of cold water.—Add chemic a teaspoonful at a time until the desired color is obtained. The more chemic is used the darker will be the color.

PURPLE FOR SILK.—The above may be changed to a beautiful purple as follows :

Having first obtained the light blue by dipping in the home made blue dye tub, and dried, dissolve 4 ounces of alum in sufficient water to cover the goods (1 pound of silk), and dip when the preparation is a little warm. If the color is not full enough add a little chemic.

CINNAMON FOR COTTON AND SILK.—The following makes a very beautiful cinnamon or brown for silk or cotton. It is a new process and will be found worth trying :

Dissolve 2 ounces of blue vitriol in 1 gallon of water, and in this dip the goods for 15 minutes. Then run it through lime water, and you have a beautiful sky blue of much durability.—Next dissolve 1 ounce of prussiate of potash in 1 gallon of water and run the goods through the solution and you have the desired color.

CRIMSON FOR SILK.—The following makes a beautiful and durable crimson for one pound of silk:

Dissolve 3 ounces of alum in enough water to cover the goods, and raise to about blood heat, then dip one hour. Take out and drain. Have prepared another dye by boiling 10 minutes, 3 ounces cochineal, 2 ounces bruised nutgall and $\frac{1}{4}$ ounce cream tartar in one pail of water. When a little warm begin to dip, raising the heat to a boil, and dip one hour. Then wash and dry.

YELLOW FOR SILK.—It may be noted here that the yellow or green dyes for woolen, work equally well on silk.

For 1 pound of silk dissolve 3 ounces of alum and $\frac{3}{4}$ ounce sugar of lead, in water to cover the goods, which should be immersed therein over night. Take out and drain; have ready a new dye made with fustic in which dip the goods until the desired color is obtained.

ORANGE FOR SILK.—The following simple process will give a very fine orange :

Dissolve 1 ounce each of annato and soda in water enough to cover the goods, and repeat until the desired color is obtained.

Rust Spots.

Brown or rust spots that sometimes occur in coloring silk or woollen goods, may be removed or prevented by the following process :

Make a weak lye and have it scalding hot, and put your goods in for fifteen minutes. Or throw some ashes into your dye and run your goods in it five minutes. The spots will entirely disappear.

Muriate of Tin.

This article enters into many of the foregoing recipes for dyes. If you cannot get it of the druggists, you can make it for yourself after the following rule, and keep it on hand for use whenever wanted :

Take a piece of block tin as large as a walnut; melt it and pour it from the height of a few feet into a pail of water, to reduce it to small particles, that the acids may the more readily act upon it. Take it from the water, dry it and put into a strong glass bottle. Pour over it 12 ounces muriatic acid. Then add 8 ounces sulphuric acid, slowly, say a tablespoonful at intervals of about five minutes, that you may not break the bottle by heat. After the acid is all in and the ebullition has ceased, stop the bottle tight, with a glass stopper or otherwise, and in twenty-four hours it will be ready for use.

Lime Water.

This is another article that comes in use frequently in the preparation of dyes. It is made as follows:

Slack 1 pound of stone lime in a pail of water; stir well and let it stand until it becomes clear, and then turn into a tub of water in which dip the goods. If strong lime water is wanted take $1\frac{1}{2}$ pounds lime instead of 1 pound as above.

To Clean White Ostrich Feathers.

The following will frequently be found useful in

case of accidental soiling of white plumes, or where they become soiled and faded from long usage :

Four ounces of white soap, cut small, dissolved in 4 pints of water, rather hot, in a large basin; make the solution into a lather. Introduce the feathers, and rub well with the hands for five or six minutes. After this soaping wash in clear water, as hot as the hands can bear. Shake until dry.

To Wash Scarlet Flannel.

The following is a German plan for washing bright colored articles, without in the least injuring their color. It is said that if flannel is soaked in pure cold water before making up, it never shrinks at all. Get a washing trough filled from the pump, and in this place the flannel. As soon as it sinks to the bottom it is taken out and hung out without any squeezing. It drains itself, and does not lose the appearance of new flannel when dry.

Take a handful of flour mixed with a quart of cold water, and boil ten minutes. Add it to the water you have ready to wash in. The articles will require many rinsings in clean water after being washed in this mixture; but if carefully done, the most brilliant scarlet will lose none of its brightness.

To Refine Soap.

The following may be useful to somebody :

Make a kettle of brine—1 pint of common salt to 2 gallons of water. In 5 gallons of the brine boil 15 pounds of soap for two hours. When cold, cut in bars, scrape the sediment from the bottom of the bars, lay them on a sloping shelf to drain well, exposed to the sun for bleaching for a good while.

Sympathetic and Invisible Inks.

The use of these inks for pleasing experiments is a common thing, and they have sometimes been used for important purposes, carrying information through an enemy's lines, holding secret correspondence, &c.

The following full classification and explanation, may be used by some for pleasure, and by others for profit:

Sympathetic inks are of four kinds: 1. When the writing becomes visible by simply applying heat or atmospheric moisture or dryness. 2. When peculiar gases or vapors make it visible. 3. When solutions of chemical or other compounds accomplish the same thing. 4. When the simple action of light will make the writing or drawing visible (Photographic preparations).

FIRST CLASS.—No. 1. *Black Sympathetic Ink.*—Dissolve equal parts of muriate of ammonia and sulphate of copper, in as little water as they will dissolve in. At common temperature, the writing with this is invisible. Warm it, and the writing will appear, and disappear again when taken into common temperature. Heat it quite hot and the writing becomes a permanent black.

No. 2. *Red Sympathetic Ink.*—Nitrate of the deutoxide of copper. A weak solution forms an invisible writing, which becomes red by heating.

No. 3. *Yellow Sympathetic Ink.*—Chloride of copper. A very dilute solution is used, invisible till heated. To make it, dissolve equal parts of blue vitriol and sal ammoniac in water.

No. 4. *Yellow and Green Ink.*—Nitrate of nickel and chloride of nickel. A weak solution forms an invisible ink which becomes green by heating when the salt contains traces of cobalt, which usually is the case; when pure, it becomes yellow.

No. 5. *Green and Red Ink.*—Chloride of cobalt. A properly diluted solution will produce a pink writing which will disappear when thoroughly dry, become green when heated, disappear when cold, and pink again when damp. When often or strongly heated it will at last become brown red.

No. 6. *Blue Ink.*—Acetate of the protoxide of cobalt. When the solution of this salt contains nickel or iron, the writing made by it will become green when heated; when it is pure and free of these metals it becomes blue.

No. 7. *Light Brown Ink.*—Bromide of copper. Perfectly invisible writing, which appears very promptly by a slight heating, and disappears perfectly by cooling. To prepare it, take one part bromide of potassium, one part blue vitriol, eight parts water. It is better also to discolor the blue vitriol with one part of alcohol.

Amusing Application.—A winter scene may be so executed that the green leaves of the trees and the grass on the foreground are painted with ink made from cobalt and nickel solution, No. 6: the red berries and flowers with No. 2, yellow flowers and fruit with No. 3, and the blue flowers with pure cobalt, 6. When such a picture is slowly and carefully heated, the invisible parts of the plants become visible, and it is as if the heat changed the winter into a summer scene. There are several other substances which may be used for invisible writing, which become visible by heating—lemon and onion juice, milk, diluted sulphuric acid, etc., etc.

SECOND CLASS.—No. 1. *Dark Brown Ink.* Acetate of lead. A drawing or writing with a strong solution of this salt becomes dark brown by exposure to sulphide of hydrogen gas.

No. 2. *Dark Blue Ink.*—Iodide of potassium and starch. Writing with this becomes blue by the least touch of acid vapors in the atmosphere. It is in fact the celebrated ozone test. To make it, boil starch and add a small quantity of iodide of potassium in solution.

No. 3. *Light Blue Ink.*—Sulphate of copper. A very diluted solution will produce an invisible writing which will turn light blue by vapors of ammonia.

No. 4. *Red Ink.*—Soluble compounds of antimony will become red by sulphide of hydrogen vapor.

No. 5. *Yellow Ink.*—Soluble compounds of arsenic and per oxide of tin will become yellow by the same vapor.

No. 6. *Flesh-colored Ink.*—Soluble compounds of manganese become flesh-colored by the same vapor.

No. 7. *Blood-red Ink.*—An acid solution of chloride of iron is diluted till the writing is invisible when dry. This writing has the remarkable property of becoming red by sulpho-cyanide vapors, and it disappears by ammonia, and may alternately be made to appear and disappear by those two vapors. To make this experiment more striking, take two wide-mouthed jars, one with some liquid ammonia on the bottom, the other with some strong sulphuric acid and sulpho-cyanide of potassium. The last salt is added from time to time in a small quantity.

Amusing Application.—As lead, antimony, ar-

senic and manganese, Nos. 1, 4, 5, and 6 above, all become respectively brown, red, yellow, and pink, by sulphide of hydrogen vapors, a drawing may be made with solutions of the salts of those metals, which will show the different colors when exposed to those vapors. However, they do not disappear again, like the sympathetic inks of the first class.

To make the sulphide of hydrogen gas, pour some diluted sulphuric acid on powdered black sulphide of iron. to form

FIFTH CLASS.—Many-colored Inks.—A very diluted solution of chloride or sulphate of iron used for writing, will turn black when washed over with a decoction of gallnuts or logwood; will turn blue by a solution of the yellow prussiate of potash, red by sulphocyanide of potassium, etc., or one may write with one of the last solutions, and to make it visible wash it by means of a soft brush with an iron solution.

FOURTH CLASS.—This class belongs to the photographic department. One of the simplest preparations is a diluted solution of nitrate of silver used on paper which has been previously washed with sea-water or some other diluted salt solution.—This writing will become black by exposure to light.

Domestic Wines.

The past few years have witnessed many changes, and one of the most marked of them all is the change that has come over people in reference to the consumption of the co-called foreign wines. The varieties of domestic wines that are now made will account for this change measurably. A very nice article of sherry is made from the common rhubarb or pie plant, and its manufacture has become a large and important business in many localities. The following is the process for manufacturing

PIE PLANT WINE.—Trim off the leaves and grind and press the stalks in any cider mill. To each gallon of juice add 1 gallon of water and six pounds of refined sugar, and fill the cask, leaving the bungs out. A moderately cool cellar is the best place to keep it. Fill up occasionally either from juice kept on purpose, or with sweetened water, so that impurities which rise to the surface while fermentation is going on, may be worked off. When sufficiently fermented, which will require from one to two months, bung tightly and let it remain until winter, when it may be racked off into other casks, or bottled. Some persons refine it before bottling, by putting into each barrel two ounces of isinglass dissolved in a quart of wine.

The manufacture of this wine was inaugurated in this country by the late B. P. Cahoon of this city (Kenosha), and the above is his process.

Here is another method:

For every 4 pounds of the stalks, cut fine pour on 1 gallon of boiling water, adding 4 pounds brown sugar; let it stand covered 24 hours having added also a little cinnamon, allspice, cloves, and nutmeg bruised as may be desired for flavoring. Strain, let stand a few days and bottle.

ANOTHER METHOD.—Peel and slice the stalk of the leaf as for pies; put a very small quantity of water in the vessel, just enough to cover the bottom; cover the vessel and bring to a slight boil. Then strain, pressing out all the liquid; to this liquid add an equal quantity of water, and to each gallon of the mixture add 4 pounds good brown sugar; set aside, ferment and skim. Leave in the casks and in bulk as long as possible before using. All wine is better kept in casks.

RHUBARB CORDIAL.—The following makes a warm cordial, laxative medicine, good in weakness of the stomach and bowels, and for regulating and strengthening the whole viscera:

Take of sliced pie plant or rhubarb 5 ounces; lesser cardamon seeds, bruised and husked, 1 ounce; saffron 4 drams; Spanish white wine 4 pints; proof spirits 1 pint. Digest for ten days and strain.

Currant Wine.

The most common of the domestic wines, and probably the best, is made of the common red cur-

rant. When well made it is a good substitute for any of the still wines.

Pick your currants clean and as free from stems and leaves as possible, and express the juice with whatever facilities you have. After you have pressed out all the juice you can, pour on to the crushed fruit as much boiling water as you have of the juice, or if you want more body to your wine, less. Let it stand 2 hours, and then press out and mix with the juice. To each gallon of the mixture add 4 pounds good brown sugar. Pour into your cask and let it stand 3 or 4 weeks, or until it has worked, with bung hole simply covered with a piece of gauze to keep out flies, etc. When it has done working bung it up till you are ready to bottle. When bottled lay the bottles on their sides in the cellar.

Some persons use but one-quarter juice in making currant wine, but the excellence of the wine will be in about the proportion of currant juice used, the less water is put into it the better it will be.

Blackberry Wine.

There is no wine equal to the blackberry wine, when properly made, either in flavor or for medical purposes, and all persons who can conveniently do so should manufacture enough for their own use every year, as it is invaluable in sickness as a tonic, and nothing is a better remedy for bowel diseases.

The following process for making blackberry wine is recommended by a gentleman who for three years has made the best blackberry wine we ever had the pleasure of tasting, and we are glad to be able to furnish it to the patrons of this book.

To each quart of juice, take 3 quarts of water and 3 pounds of sugar—brown will do. If you have plenty of juice, you can use less water and it will much improve the quality. One bushel of berries, if good, will make ten gallons. Mix thoroughly, strain, and put into a strong cask, which should be well cleansed and fumigated. The cask must be full, to allow the refuse to work out during the process of fermentation. You must fill up the cask

thrice a day with fresh water, so that the refuse will all run out. Put a spigot into the cask before putting in the wine, and slant it enough to prevent the dregs from running out when you are racking off. Cork the cask tightly after it has fermented, unless you should choose to fill it into champaign bottles, cork and wire them, and then seal. This will give you a sparkling wine, vastly superior to any Catawba, and much cheaper.

Here is another that is claimed by those who have used both, to be the best:

Measure your berries and bruise them; to every gallon adding a quart of boiling water. Let the mixture stand twenty-four hours, stirring occasionally; then strain off the liquor into a cask, to every gallon adding 2 pounds of sugar; cork tight and let it stand till the following October, and you will have wine ready for use, without further straining or boiling, that will make lips smack, that never smacked under similar influences before.

STILL ANOTHER.—Having procured berries that are fully ripe, put them in a large vessel of wood or stone, with a cock in it, and pour upon them as much boiling water as will cover them. As soon as the heat will permit, put the hand into the vessel, and bruise the berries well, till they are all broken. Then let them stand covered till the berries begin to rise towards the top, which they generally do in three or four days. Then draw off the clear liquor into another vessel, and add to every 10 quarts of this liquor, 1 pound of light brown sugar. Stir it well and let it stand to work a week or ten days in another vessel. Take 4 ounces isinglass and lay it to steep twelve hours in a pint of white wine. The next morning boil it over a slow fire till all is dissolved. Take a gallon of blackberry juice, put in the dissolved isinglass—give them a boil together, and pour all into the vessel. Let it stand a few days to purge and settle, then draw it off and keep in a cool place.

ANOTHER METHOD.—Take ripe blackberries, press the juice from them and let it stand about a day and a half to ferment, (light covered,) and skim off whatever rises to the top; then to every gallon of juice add 1 quart of water and three pounds of good brown sugar, or if you want it very nice take white sugar.—Let it stand twenty-four hours, skim and strain, then barrel it. After standing about nine hours it should be racked off, bottled, and corked close. Age will improve it.

Compound Wine.

A most excellent wine, second to none for family use, is made as follows:

Take equal parts of red, white and black currants, ripe cherries and raspberries, well bruised and mixed with soft water in the proportion of 4 pounds of fruit to 1 gallon of water. When strained and pressed, add 3 pounds of moist sugar to each gallon of the liquid. After straining, open for three days, during which

time stir frequently. Then put in a cask and let it stand two weeks to work; then add a ninth part of brandy and bung the whole up. In a few months it will be ready for use.

Black Currant Wine.

Take cold, soft water, 10 gallons, black currants, 6 gallons, strawberries, 3 gallons. Ferment and strain. Mix raw sugar, 25 pounds; red tartar, in fine powder, 6 ounces, orange, thyme, 2 handfuls, then add 2 or 3 quarts of brandy to make 18 gallons.

Apple Wine.

The following is said to make a healthy, palatable wine.

To every gallon of apple juice, immediately from the press, add 2 pounds loaf sugar, and boil as long as any scum rises; then strain it through a sieve and let it cool; let it work in the tub for 2 or 3 weeks, then skim off the head, draw it clear off and turn it. When made a year rack it off, and refine it with isinglass; then add $\frac{1}{2}$ pint best rectified spirit of wine to every 8 gallons.

Cider Wine.

The following process for making cider wine, or apple champagne (not *sham-pagne*) is none the worse for being old. It was communicated some years since by the celebrated chemist, Prof. Horsford, to the Massachusetts State Horticultural Society. Whoever will take the trouble to follow the directions *exactly*, will be rewarded with success, and at a very small cost besides the care, will have just as good wine as they could buy at the liquor stores for \$1.50 a pint bottle, with the advantage of *knowing* that it contains no poisonous drugs or rot gut whiskey:

Let the new cider from sour apples, (ripe, sound fruit, of course) ferment from one to three weeks, as the weather is warm or cool. When it has attained to a lively fermentation, add to each gallon, according to its acidity, from $\frac{1}{2}$ pound to 2 pounds white crushed sugar, and let the whole ferment till it possesses precisely the

taste which it is desired should be permanent. In this condition, pour out a quart of the cider and add for each gallon $\frac{1}{4}$ ounce of *sulphite* of lime, not *sulphate*, remember. Stir the powder and cider until intimately mixed, and return the emulsion to the fermenting liquid. Agitate briskly and thoroughly for a few moments and then let the cider settle. Fermentation will cease at once. When, after a few days, the cider has become clear, draw off carefully, to avoid the sediment, and bottle. If reasonably cold, which is better, it will become a sparkling cider-wine and may be kept indefinitely long.

Ginger Wine.

The following preparation makes a delicious and safe beverage, that for all practical purposes is far better than half the stuff you buy at the liquor stores for wine, under imposing foreign names, put up in mysterious, foreign-looking bottles.

Put into a nice boiler 10 gallons of water, 15 pounds of lump sugar, with the whites of 8 eggs, well beaten and strained. Mix all well while cold. When the liquor boils, skim it well, and add half a pound of ginger root, bruised, and boil it twenty minutes. Have ready the rinds, cut very thin, of 7 lemons, and pour the hot liquor on them. When cool, put it in your cask with two spoonfuls of yeast. Put a quart of the warm liquor to 2 ounces of isinglass shavings; whisk well three or four times and put all in the barrel with $1\frac{1}{2}$ gallons pure spirits. Next day stop it up; in three weeks bottle it, and in three weeks more it will be ready for use.

ANOTHER GINGER WINE.—Here are directions for another ginger wine that is said to be suitable for all purposes for which any wine is used, for medical purposes. A half pint taken hot on going to bed will be a capital thing for a cold. For females in a weakly condition with little or no appetite, spare in flesh, with all the symptoms of indigestion, a wineglass of this wine taken about 20 minutes before meals and followed up for a month, will act like a charm; imparting new life to the torpid digestive organs, and giving a healthy and vigorous appetite.

Take 98 per cent. alcohol 1 quart, best ginger root bruised 1 ounce, cayenne pepper ground 5 grains, tartaric acid 1 drachm; mix and let stand one week and draw off carefully from the sediment. Then add 1 gallon of water in which 1 pound of crushed sugar has been boiled; mix when cold. Any quantity may be made by using the same proportions.

To give it the wine color, (though it is just as good uncolored,) use the following:

Boil $\frac{1}{2}$ ounce of cochineal, $\frac{3}{4}$ ounce cream of tartar, $\frac{1}{2}$ ounce of alum, in 1 pint of water until you get a bright red. Use enough of this to give the wine the desired color.

To make Good Cider.

As a general thing farmers do not take pains enough in making cider to ensure a good article.-- And that is the reason that we have so much poor cider, that sours before it is fit to drink. The following general rules, if followed out as they should be, will under ordinary circumstances ensure good cider; they demand a little more trouble than the ordinary mode of collecting and mashing apples of all sorts, dirty and clean, rotten and sound, sweet and sour, from the tree and the ground, and the rest of the slovenly process usually employed:

1. Always choose perfectly ripe and sound fruit.
2. Pick the apples by hand. An active boy with a bag slung over his shoulders, will soon clear a tree. Apples that have lain any time on the soil contract an earthy taste, which will always be found in the cider.
3. After sweating, and before ground, wipe them dry, and if any are found bruised and rotten, put them into a heap by themselves, for a poorer quality of cider, to make vinegar.
4. Always use hair cloths instead of straw to place between the layers of pomace. The straw, when heated, gives a disagreeable taste to the cider.
5. As the cider runs from the press, let it pass through a hair seive, into a large open vessel, that holds as much juice as can be expressed in one day. In a day, or sometimes less, the pomace will rise to the top, and in a short time grow very thick. When little white bubbles break through it, draw off the liquor by a

spiggot placed about three inches from the bottom, so that the lees may be left quietly behind.

6. The cider must be drawn off into very clean sweet casks and closely watched. The moment the white bubbles before mentioned are perceived rising to the bung-hole, rack it again. When the fermentation is completely at an end, fill up the cask with cider, in all respects like that contained in it, and bung it up tight, previous to which a tumbler of sweet oil may be poured into the bung-hole.

Grape Wine.

The manufacture of the various wines from the juice of the grape is coming to be a by no means unimportant branch of industry in this country. All the process of the vineyard, the wine manufactory, the wine cellar, etc., cannot of course be given in such a work as this, but for the domestic manufacture of wine from the grape for home use, the following instructions will be sufficient:

Take ripe, freshly picked and selected grapes, 20 pounds; put them into a stone jar and pour over them 6 quarts boiling soft water; when sufficiently cool to allow it, squeeze them thoroughly with the hand. Allow the whole to stand three days on the pomace, with a cloth thrown over the jar, then squeeze out the juice and add 10 pounds nice crushed sugar, and let it remain a week longer in the jar; then take off the scum, strain and bottle, leaving a vent until done fermenting, when strain again and bottle tight, and lay the bottles on their sides in a cool place.

Grape wine should be allowed to remain for a long period in oak casks, after it is made, before it is bottled, otherwise it will be comparatively sour to the taste. This is owing to the great quantity of tartrate of potash in the juice of the grape. When standing in a wooden cask the tartrate is deposited from the wine and adheres to the interior surface of the vessel, and it forms a thick and hard stony crust called "argal." This is the substance of which our

cream-of-tartar and tartaric acid are made. In its crude state it is employed by silk and woolen dyers in producing scarlet, purple and claret colors, in conjunction with cochineal and logwood. This explains the cause of wines becoming sweeter the longer they stand in casks in a cool situation.

Wine may be made of the juice of the sorghum cane by permitting it to ferment for a short period in the same manner as has been described for cider, then closing up the cask tight to prevent the access of air. The fermentation of all saccharine juices is due to the combination, chemically, of the oxygen of the air with some of the carbon in the sugar of the juice. A small quantity of alcohol is thus generated and absorbed by the fermented juice. Carbonic acid gas is also generated; when absorbed by the liquid and retained under pressure, this gas imparts the sparkling property of wine. When the saccharine juices are undergoing fermentation they must be tasted frequently for the purpose of arresting the fermentation at the proper stage, because there are two stages of fermentation, called the vinous and acetous. The first is that in which alcohol is produced, the second, vinegar. Many artificial wines have a slight vinegar taste, which is caused by allowing the fermentation to proceed too far.

These hints will be useful to those who prepare light domestic wines. These are now made very

generally, and are held to exert a favorable influence in many cases of dyspepsia.

Strawberry Wine.

Next to blackberries, strawberries make the best of the berry wines. The following is the process of making it :

To 1 gallon of juice, strained, add $2\frac{1}{2}$ pounds of sugar—no water ; let it stand in an open vessel twenty-four hours, occasionally skimming off the scum that rises. Then fill the cask in which it is put, full, reserving enough to fill up, as in process of fermentation it runs over. When the fermentation is completed, stop tightly. Let it stand three months ; draw off and bottle.

For the Harvest Field.

Many wish something other than water during the hot days of summer, and there are many drinks in use which serve to allay thirst more readily than the same amount of pure water. All of these popular beverages contain vegetable acids in a dilute state, and these, when taken in moderation, are both cooling and tonic. The very general use of lemonade, which may be taken as a type of these drinks, is due to something more than its agreeable taste, and is popular testimony to the refrigerant property of citric acid, qualified by sugar. Some of the acid fruits may be made to furnish cooling and pleasant beverages. Currants, dried, will be found very convenient, as their acid is very refreshing, and a large supply may be put up with very little expenditure for sugar. Where the Barberry is common, a most excellent material for summer beverages may be stored up.

The fruit simply preserved in sugar, makes a sort of conserve, which, infused in boiling water gives a palatable drink; but the best way is to make a syrup by boiling the fruit in water and convert the strained liquid into syrup by adding a pound and a half of sugar to the pint. If bottled and set in a cool place it will keep a long time. Added to water in palatable quantity, it is not only pleasant in health but very useful as a drink in fevers.

Raspberry Shrub.

This is one of the nicest and pleasantest summer drinks that can be made in the family. Prepared in the following way, it may be kept for years:

Place raspberries in a jar and cover with strong vinegar, and set in a cool place for twenty-four hours. The next day add as many more berries as the vinegar will cover, and so for a third day.—After the last berries have been in for a day, set the jar in a kettle of water, and bring it to a scald, and then strain out the juice through a flannel. Add one pound of white sugar to each $1\frac{1}{2}$ pints of juice, and heat in a tin or porcelain vessel to the boiling point, skim, and bottle. Do not boil any longer than is necessary to remove the scum.

Diamond Syrup.

The following forms a cheap and delicious beverage, much better and healthier than soda water, is easily made, and can be kept any length of time without deteriorating. It should be kept in a glass vessel as metal of any kind would spoil it:

Take 1 gallon water, 6 pounds loaf sugar, 6 ounces tartaric acid and 1 ounce gum arabic, mix and bring to a blood heat. Beat up 4 teaspoonfuls of flour and the whites of 4 eggs, and add $\frac{1}{2}$ pint of water in another vessel. When the mixture in the first vessel is blood warm, put in the contents of the second vessel and let it boil three minutes, when it will be ready for use.

TO USE IT.—Take 2 or 3 tablespoonfuls of the syrup to a glass half or two-thirds full of water, and stir in one $\frac{1}{8}$ teaspoonful of pulverized super-carbonate of soda.

Pocket Lemonade.

The following will be found not only “mighty convenient” for travelers, but a real healthy, luxurious beverage:

Powder very fine, in a porcelain mortar, $\frac{1}{2}$ ounce tartaric acid and 3 ounces of loaf sugar, and add essence of lemon $\frac{1}{2}$ drachm, by a few drops at a time, stirring the mixture after each addition till the whole is added, then mix thoroughly and divide into 12 equal parts, wrapping each up separately in white paper. When wanted for use, dissolve in a tumbler of cold water, and you will have a good lemonade.

ANOTHER.—The following seems to be about the same thing in different proportions:

Loaf sugar, 1 pound; rub it down finely in a mortar, and add citric acid $\frac{1}{2}$ ounce, and lemon essence $\frac{1}{2}$ ounce. Continue the trituration until all is intimately mixed and bottle for use. When dried, it can be wrapped up in paper and carried in your pocket.

A rounding tablespoonful of this is taken to make a half-pint of lemonade.

Persian Sherbet.

The following makes a very agreeable effervescing summer drink, and is recommended as being healthy:

Pulverized sugar, 1 pound; super-carbonate of soda 4 ounces; tartaric acid 3 ounces. Put all the articles into the stove oven when moderately warm, being separate, upon paper or plates; let them remain until all moisture is dried out, then rub about 40 drops of lemon oil thoroughly with the sugar in a mortar, then add the soda and acid, and continue the rubbing until all are thoroughly mixed. Bottle and cork tight. To a tablespoonful of this mixture add nearly a tumbler of water and drink quickly.

Cream Soda.

By the following method you may have as nice a glass of cream soda as you ever drank, without any fountain, and that you can drink at your leisure as the preparation holds the gas for some time:

Take coffee sugar 4 pounds, water 3 pints, 3 nutmegs grated, the whites of 10 eggs, well beaten, gum arabic $\frac{1}{2}$ ounce, oil of lemon 20 drops, or extract equal to that amount. By using oils or extracts of other fruits you can vary the flavor to suit the taste. mix all and place on a gentle fire for half an hour, stirring all the time. Remove from the fire, strain and divide into two equal parts; into one half put 8 ounces super-carbonate of soda, and in the other half 6 ounces tartaric acid. Shake well, and when cold they are ready for use, by pouring three or four spoonfuls from both parts into different tumblers which are one third full of cool water. Stir each and pour together and drink at your leisure.

Imitation Preserved Ginger.

The following is an excellent substitute for the real West India importation, which is considered a great delicacy, but is very expensive. This substitute improves by keeping:

Scrape well and split in halves *young* yellow carrots, and cut into the shape of West India ginger, as we see it preserved. Par-boil them and do not let them lose their shape. Drain thoroughly and let them lie over night on platters inclined so as to allow them to drain. Weigh and put with them an equal weight of "syrup of ginger," which may be obtained from any respectable chemist. Let them simmer slowly over a low fire for four hours. Fill the preserve pots, taking care to fairly apportion both vegetables and syrup. Tie down with bladder or otherwise seal tightly.

Home-Made Candy.

The following rule for making a very nice candy at home, when you will have the advantage of knowing that it contains no improper substances, will frequently be found convenient:

To 1 cup coffee sugar add 1 cup cider vinegar. If the vinegar be very sour, put in one-third water. -Boil fifteen or twenty minutes, then work till white.

Molasses Candy.

The following process will make a fine molasses candy without color, butter or lard, and without any flavoring material, though it may be flavored to suit the taste, if thought desirable:

Take equal quantities of good brown sugar and best molasses; put them into a porcelain kettle, and when it begins to boil, skim it well and strain it, or pour it through a fine wire sieve; then return it to the kettle and continue to boil, until the candy when suddenly cooled, will be perfectly brittle, and does not adhere to the teeth when bitten. When done, pour it on a platter or plate, which has been greased, and as it gets cool, begin to throw up the edges and work it by pulling on a hook or with the hand, until bright and glistening like gold. Put a little flour on the hand occasionally. If much is made, keep the mass by a warm stove while drawing it into sticks, occasionally rolling them to keep

them round, until all is pulled out and cold, then with shears clip a little upon them, and they will break quickly, while the stick will bend.

How to Pop Corn.

Here is one way to pop corn that is claimed by some people as the best way.

Heat lard in the same manner as for frying "doughnuts," and throw in half a pint or such a matter of the "eight row 'tucket corn," and cover immediately, to prevent the kernels from flying out on the floor. In an instant pop-pop, popping will commence, such as you never heard before. A minute after the popping ceases, take off the cover, and dip out with a skimmer, draining off the grease, and turn into a sieve, and put upon a pan to drain. The pan should be kept upon the stove so that the corn will retain its heat long enough for the lard to run off, otherwise it will be greasy. While cooling, salt to your taste.

A BETTER WAY.—We think a better way to pop corn is to take the small "pop corn" and a good corn popper that costs only a quarter of a dollar.—Nearly every kernel will turn out as white as snow. Pour into a tin pan and set it in the stove oven a few minutes, and it will be crisp and brittle.

Pop Corn Balls.

If you wish to make the above into delicious pop corn balls, proceed as follows :

Boil 1 pound of sugar with a little water, until it becomes waxy when dropped in water, then remove from the fire and dip into it half a dozen tablespoonfuls of gum arabic solution made quite thick by pouring boiling water upon the gum. Pour the mixture on to the popped corn and stir it up, that all may come in contact with the syrup ; then make the corn into balls by rolling in the hand as you would a snow ball.

ANOTHER METHOD.—Here is another method that is much simpler, while it may be just as good. Try it and see :

Pop the corn in a kettle. While it is hot pour in some molasses of good quality. Keep it on the fire and stir briskly. After stirring five or ten minutes, take the corn off the fire, and as it

cools form it into balls with the hands. Have ready some corn parched in the usual way, and roll the warm ball in it.

Substitute for Cream.

The following preparation will be almost as good for any pudding in which eggs are used, as good, rich cream, and much better than thin cream:

Boil $\frac{3}{4}$ of a pint of sweet milk—new milk is best. Beat the yolk of 1 egg, and a level teaspoonful of flour, with sugar enough to make the cream very sweet. When the milk boils, stir this into it, and let it begin to simmer, stirring it; let it cool and flavor to the taste.

Scalded Cream.

This is one of the delicacies that our English cousins indulge in, under the name of Cornwall cream. This process is generally used in Devonshire, in dairies of 6 or 8 cows, and the cream finds a ready market in London, at the same price as butter:

Strain the milk into tin pans, (those holding 8 or 10 quarts are the most convenient,) and let it stand 10 or 12 hours. Then carefully place it on the stove, or, to prevent the milk from burning, on a pot of boiling water, until it is scalding hot, but not made to boil. Carefully carry it back to the dairy or milk room, and let stand 10 or 12 hours longer, skim it, and you will have cream equal to any in Cornwall.

Perfume for the Handkerchief.

The following preparation makes a very choice perfume for toilet purposes, and would be preferred by many to the “night blooming cereus” itself:

Take 1 pint best cologne spirits, $\frac{1}{2}$ ounce oil jessamine, $\frac{1}{4}$ ounce oil geranium, $\frac{1}{4}$ ounce extract of musk, or those that prefer it may add six drops otto of rose instead; mix and bottle tight.

Tincture of Roses.

To make a tincture of roses that will last for years

and yield a perfume but little inferior to otto of roses, try the following:

Take a quantity of the leaves of the common rose, and place without pressing them, in a common bottle; pour some good spirits of wine upon them, close the bottle and let it stand till required for use.

To Make Rose Water.

When the roses are in full bloom, pick the leaves carefully off, and to every quart of water put a peck of the leaves; put them in a cold still over a slow fire, and distill slowly; then bottle the water; let it stand two or three days and cork it closely.

To Extract the Odor of Flowers.

Here is another method of securing the odor of roses and other flowers, by which ladies may secure themselves genuine perfumes, and at the same time have a few hours pleasant employment. Roses, and all flowers containing oils—most highly perfumed flowers contain a large quantity of oil—may be made to yield their aromatic properties by steeping the petals in a saucer or a flat dish of water and setting it in the sun.

Cover the petals entirely with water—rain water would be the best. Allow a sufficient quantity for evaporation, and leave the vessel undisturbed for a few days. At the end of this time a film will be found floating on the top. This is the essential oil of the flower, and every particle of it is impregnated with the odor peculiar to the flower. Take it up carefully and put it in tiny vials, and allow them to remain open till all watery particles have evaporated.

A very small portion of this will perfume glove-boxes, drawers, apparel, etc., and will last a long time. The odor of musk blossoms is one of the most lasting, as well as the most pungent of floral scents, and is more delicate, though not so lasting as the animal product.

A Fine Cologne.

The following makes a very fine cologne if correctly made with good material:

Take 1 quart of good alc ohol, 1 ounce each oil lavender and oil lemon, 1 drachm oil cinnamon, 2 drachms extract or tincture of musk, and six drops otto of rose. Mix well together.

Gelatine Soap.

It is impossible to cleanse greasy dishes without soap, and many soft hands are rendered unfit for needlework by daily immersions in hot dish water. The following is recommended as an emollient for chapped hands, and also a superior soap where a quick lather is desired:

To 2 pounds of olive soap cut up into small slices, add 2 ounces of borax; put the ingredients into a crock, pour over 2 quarts of cold water, set the vessel on a part of the range where there is but little heat, stirring occasionally until the borax is dissolved (8 or 9 hours), and when cooled a thick gelatine is produced, which housekeepers need use but once to prove its efficacy and economy.

To Remove Warts.

The following inexpensive and convenient remedy will remove these unsightly and troublesome excrescences:

Dissolve as much common washing soda as the water will take up; wash the warts with this a minute or two, and let them dry without wiping. Keep the water in a bottle, and repeat the washing often, and it will take away the largest warts.

Russian Moth Antidote.

In Russia where, for the greater part of the year, fur constitutes so large a part of the wearing apparel, they use the following preparation to preserve their furs from the ravages of the moths:

Macerate gum camphor 1 ounce, powdered shells of red pep-

per 1 ounce, in 8 ounces strong alcohol for 7 days; then strain.—Sprinkle the furs, and roll up closely in cloth or paper.

Cherry Tree Gum Cement.

The following simple information is worth knowing:

Broken china or glass ware may be neatly and securely mended by cementing the broken edges with cherry tree gum while soft. Press the edges firmly together till dry, and the break is scarcely perceivable and stands water well.

To Clean Canary Birds.

These little things like many larger and meaner objects are sometimes covered with vermin, that are a source of great annoyance to the birds.

Place a clean white cloth over their cage at night. In the morning it will be covered with small red spots, so small as hardly to be seen except by the aid of a glass. These are the vermin and may be destroyed by dipping the cloth in hot water.

Cold Cream.

The following is the manner of making this popular adjunct to the toilet “fixins:”

Melt together oil of almonds 3 ounces, spermaceti 1 ounce, white wax $\frac{1}{4}$ ounce. When melted pour into a warm glass and add by degrees as much orange flower or rose water as the mixture will take up.

How to Make Tea.

There is a great difference in the quality of tea made by different persons, out of the same box.—There is a deliciousness—a mellowness, an old stager would call it—when made as it should be, that few housekeepers evoke. The following is the plan practised by those who make the best tea:

Pour tepid or cold water enough on the tea to cover it, place it on the stove hearth, top of tea kettle, or any place where it will be warm, but not enough to cause the aroma to escape in steam. Let it remain about half an hour, then pour on boiling water and bring it to the table.

Preserving Fruit.

This has come to be one of the regular annual duties in almost every household, and as few of the young ladies of the present day go through with a course of education in this branch of the useful, before they assume the duties of housekeepers themselves, direct instructions in some form become a necessity. Young ladies know well enough how to dispose of a good many jars of preserved fruit, but they seldom think of the care and labor bestowed in their preparation. But that is all right ; sufficient unto the day is the evil thereof. As long as they can turn to the instructive pages of this little volume, when they come to the necessity of doing for themselves, it is just as well as to go through a long apprenticeship.

With the various appliances for preserving fruit, it is now easy and economical in money as well as in health, to have a daily supply of good, naturally flavored, almost fresh pie plant, strawberries, cherries, blackberries, raspberries, peaches, huckleberries, apple sauce, etc. The fruit thus kept is healthful and economical, as it furnishes both nutriment and condiment.

THE FRUITS.—Fruits of all kinds are easily preserved, as are also rhubarb or pie plant, and tomatoes. The main supply of fruits proper for the year consists, in the order of abundance: *First*—Of

peaches, when plenty. *Second*—Strawberries.—*Third*—Cherries, when plenty. *Fourth*—Pears. *Fifth*—Raspberries and blackberries. *Sixth*—Huckleberries, etc. Apple sauce is put up plentifully at different seasons, usually in the bottles first used for other fruits. Pie plant and tomatoes are preserved in large quantities, so as to have an abundance whenever wanted, until they come again. Indeed, all the fruits are put up in supply to last until a new crop of each, and in a season of special abundance, a two years' stock is laid in. We seldom find much difference in bottles of fruits opened after one, two, and sometimes even three years.

BOTTLES AND CANS.—Many different kinds of bottles and cans are used with more or less success but the editor of the American Agriculturist, who is good authority upon such matters, decides that a simple form of glass bottle is the best for all kinds of fruits. One fact is established by universal experience and that is, glass is always preferable for all preserved fruits, etc., as unpleasant effects may sometimes result from corrosion. Any kind of glass bottles will answer, if the neck be large enough to receive the fruit handily, and of such form as to admit of tight corking—if soft corks of good quality can be obtained to fit them. If the corks are softened in hot water, pressed in firmly and covered tightly with wax and a cloth tied on, they answer.

A corked bottle inverted into a little tin dish or paty pan, or in a saucer containing a spoonful or two of cement, is effectually closed, if care be taken not to leave any air bubbles around the edge. The following makes a good cement for sealing jars, bottles, etc. :

Take $1\frac{1}{2}$ ounces of tallow and melt with 1 pound of common rosin, in a tin or iron vessel. Make in quantity, and heat it up as often as needed ; every melting improves it.

The only care required in using wax for closing, the bottle mouths is to have the necks wiped clean after the fruit is put in, so that the wax will adhere firmly to the glass. Many now use some of the patented bottles with covers closing upon an india rubber ring, which dispenses with wax. Any form that will absolutely shut out all access of air will answer every purpose.

THE COOKING VESSEL.—The best is the porcelain kettles, quite common, which are very convenient for many cooking purposes. They are iron vessels coated on the inside with porcelain, or white earthenware, glazed. One holding five or six quarts will answer, Wide, flat ones are preferable. Copper or even brass vessels will do, if well cleaned, or a tin pan or pail can be used.

THE SUGAR.—For very nice preserved fruit, as white peaches and pears, the best refined A sugar is desirable, and for all kinds, we think sugar as good as the refined B sugar is desirable, and even

cheapest, on the whole. For apple sauce, put into cans for general family use, C, or the best light brown, will answer. Our rule is, to use just sugar enough to fit the different kinds of fruit for the table. Some families like more, and some less; hence no definite rule can be given. For the sweeter fruits, strawberries, peaches, sweet pears, huckleberries, and the like, we use four to six pounds of sugar to the gallon of water, or one-half to three-fourths pound to the pint. For more acid fruits, as cherries, plums, sourer pears, currants, crab apples, etc., about one pound to the pint, more or less, according to the acidity and ripeness.

SELECTING AND PREPARING THE FRUIT.—As a rule, choose fully ripe fruit, but not that over ripe. A soft or decaying spot may injure the flavor, and tend to decay the whole. If too green, the flavor will be inferior. The berry fruits are to be sorted, defective ones rejected, stems and hulls removed, and carefully and quickly washed if soiled, though it is always to be avoided if possible, as it injures the flavor, especially of raspberries and strawberries.—Peaches, pears, etc., need paring. Some scald peaches, to aid in removing the thin skin, but they are better pared. They may be preserved whole, but are better cut in halves and the pits removed.

COOKING THE FRUIT.—Three methods are used: some place the fruit in bottles, with sugar added,

put on the covers nearly tight, set the bottles in warm water, and heat to boiling, and after time is given to heat the fruit through, the covers are fastened down closely. We prefer, as being less troublesome, to first cook the fruit in the porcelain or tin vessel, and then dip it hot into the jars, which must have been previously warmed to prevent their breaking, as noted below. For the finest preserves, the fruit may be cooked in a syrup first, and then dipped out into the hot jars, and a new syrup be filled in hot. The cooking syrup may be used for several successive batches of fruit, and finally for poorer kinds of fruit, or making common sauce. For ordinary preserving, the fruit and the syrup used in cooking it, may be dipped together in to the bottle. The amount of cooking is important. Too little hazards the keeping, and too much not only mars the appearance, but it greatly injures the flavor.* In all cases, have the syrup boiling hot and over the fire when the fruit is first put into it, and it will then heat through without cooking soft or losing its flavor. Only fruit enough to fill three or four bottles should be cooked at a time, or some will be overdone.

Strawberries should cook but three or four minutes before dipping them into the bottles, which should previously all be ready and hot. With this precaution they retain their natural form and flavor.

Peaches, being larger, require a little more time

to heat through, but when fully ripe, five to seven minutes is long enough, and the same is true of well ripened pears, especially the Bartletts and Virgalieus, which, by the way, make a most delicious preserve.

Quinces and hard pears may cook ten to fifteen minutes or more, for they should become tender.

The general rule for cooking is to have the soft fruits just heated through to the centre, as quickly as may be after they go into the syrup, and then get them into the bottles immediately, giving no time for the escape of the aroma.

Tomatoes, well ripened, are scalded to skin them easily, then put into just water enough to prevent burning, and carefully cooked three quarters to a full hour, thus reducing their bulk materially. A very little salt is used but no sugar. They can be seasoned and sugared when wanted for use.

BOTTLING.—Have all needed bottles, corks, covers, wax if used, etc., ready before beginning to cook the fruit. Have a kettle of hot water on the stove, and the last thing before cooking the fruit, dip a bottle rapidly in and out of the hot water until heated through, then fill it with the hot water and let it stand, and so with all the bottles needed for one batch of fruit. When that is cooked pour out the hot water, and dip full of fruit and syrup, or, if new syrup is used, as noted above, fill with the hot fruit skimmed out, and pour in the new syrup last. For soft or nice fruits, dip in carefully with the jar inclined, to avoid bruising or breaking. Let the bottles stand about two minutes, jarring them to facilitate the escape of air bubbles; wipe the tops carefully clean with a damp hot cloth, then pour in enough more syrup to fill them, if there is much settling. Now apply the caps and clamps, or other covers or corks, and close the bottles as closely as may be—or air tight. One point is, to have little if any air left in the fruit. As there is always a little, or enough to produce a taint of mouldiness on the top, which does not injure the mass in the bottles, if not mixed with it in handling, it is well in

opening a bottle to always remove a thin film from the top.—Store the bottles on shelves in the cellar or other cool place, where they will not be exposed to great changes of temperature.

PIE PLANT OR RHUBARB.—Put up as follows, this is excellent for winter and early spring use as sauce and in making pies :

Cut the stems in small pieces, as usual. Cook with only a few spoonfuls of water, to keep it from burning before its own juices are at liberty. Boil half an hour or so, or until ready for the table, and bottle without sugar added.

To Preserve Tomatoes.

The following method is highly recommended by those who have tried it, for preserving tomatoes with sugar :

Take sound, ripe tomatoes, and half the weight of the tomatoes of finely pulverized sugar. Remove the skins from the fruit without scalding. Dissolve and boil the sugar in a little water until it is thick, then put in the tomatoes and take from the fire. When cool, skim them out, heat the syrup, throw in the fruit, until the process is repeated three times. Stew $\frac{1}{4}$ pound green ginger root for every 10 pounds of preserves. Add all together, and boil gently until done. Let the syrup become thick before the tomatoes are put in. Seal in the usual way.

TOMATOES WITHOUT SUGAR.—We have had all winter and until the fruit grew again, tomatoes with all the flavor of freshly picked ones. Stewed and poured upon toasted bread they are delicious.

Pick nice ripe tomatoes, fresh from the vines ; scald them to remove the skins ; put them into your preserve kettle and heat thoroughly, but not to cook, and then put them into glass jars and seal in the usual way.

ANOTHER.—Here is another plan for preserving tomatoes with sugar :

Pour boiling water on the tomatoes and take the skins off ; then add the weight of them in sugar, and some sliced lemons ; take a cup of ginger and tie it up in a bag loosely, and boil it in half a pint of water ; put this in and boil the whole three hours, skimming off the froth as it rises. When cool, it is ready for use.

Green Tomato Preserves.

The following will be found quite a delicious preserve:

Take tomatoes when quite small and green ; put them in cold, clarified syrup with an orange ; simmer gently over a slow fire two or three hours. Equal weight of sugar and tomatoes, and more than water enough to cover the tomatoes used for the syrup, boiled down quite thick.

Tomato Figs.

Tomatoes may be kept for years, by making them into figs after the following manner. They keep their flavor surprisingly, which is nearly that of the best quality of figs. The small pear-shaped or single tomatoes answer the best for this purpose. Ordinary brown sugar may be used, a large portion of which is retained in syrup :

Take 6 pounds of sugar to 16 pounds or 1 peck of tomatoes.—Scald and remove the skins in the usual way. Cook them over a fire, their own juice being sufficient, without the addition of water, until the sugar penetrates, and they are clarified. They are then taken out, spread on dishes and flattened, and dried in the sun. A small quantity of syrup should be sprinkled over them while drying ; after which pack them down in boxes, treating each layer with powdered sugar. The syrup is afterwards concentrated and bottled for use.

CURRENTS.—The following will be found convenient for tarts and the like :

Pick the currants when they are dry ; for every $1\frac{1}{4}$ pounds of currants put 1 pound good sugar, into a preserving kettle with as much currant juice as will dissolve it. When it boils, skim it and put in your currants, and boil them till they are clear. Put them in a jar and seal up as usual.

To Preserve Pears.

Pears look best if preserved whole, pared with the stems on. This fruit is very nice for common use, baked. They may be cooked in this way with the

skins on, or pared. Put them in a tin with half a teacup of molasses and the same of water, or the same of sugar and water. They will bake in half an hour. Or they may be quartered, boiled tender in a little water, and then simmered half an hour, gently, in the liquor, to which half their weight of sugar has been added. The following is the best process for preserving :

Make a thin syrup and boil them tender. If boiled too fast they will break. They will be sufficiently cooked in half an hour. If you wish them nice, let them lie in the syrup in a jar or tureen, two days. Drain the syrup from the pears ; add more sugar ; boil ten minutes ; skim, and put in the pears ; simmer them till they are transparent. Take them out ; stick a clove in the end of each, and lay in a jar when cool. Then pour over the warm syrup.

ANOTHER METHOD.—Here is another plan of preserving pears which will be found very nice :

Take 6 pounds pears to 4 pounds sugar ; boil the parings in as much water as will cover them ; strain it through a colander ; lay some pears in the bottom of your kettle, put in some sugar, and so on, alternately ; then pour the liquor off the parings over the fruit, and boil until it begins to look transparent, then take out the pears and let the juice cool, and clarify it. Put them in again and add some ginger tied up in a bag and boiled in half a pint of water. Boil until done ; take out and let the liquor boil till it has advanced to a syrup.

Peach Preserves.

Try the following, and see if it does not make a delicious preserve :

Take ripe, freestone peaches, pare, stone and quarter them.—To six pounds of the cut peaches allow three pounds of the best brown sugar. Strew the sugar among the peaches, and set them away in a covered vessel. Next morning put the whole in a preserving kettle, and boil it slowly about two hours, skimming it well, and it is complete.

Citronized Grapes.

The following method of preserving grapes will

be found to make a very useful as well as excellent conserve :

Prepare clarified syrup by dissolving 8 pounds of sugar with 1 quart of water, and then boil in this 8 pounds of green Catawba or Isabella grapes until they begin to shrink, when they should be opened on plates to cool. Keep the syrup boiling, and when approaching the consistency of good syrup, replace the grapes and boil about ten minutes, when they will become fit for the jars and for use during the summer and fall months. If to be kept for years, add a quarter of a pound more sugar.

To Preserve Watermelon Rinds.

The rinds of watermelons preserved make a fine dish, equal to what is called the citron melon in all respects. The following is the best method of preserving them:

Do not cut your rinds too thin; pare off the outside green rind; soak them two days in clean soft water, and then drain them. Take 6 pounds of sugar and 3 pints of water, boil to a thick syrup; then add your watermelon rinds; boil until they are clear; flavor with orange-flower or rose water; cool, and put away in jars for use.

To Preserve Citron Melon.

Prepare the melon by cutting off the hard rind, and then cutting into slices $\frac{1}{4}$ or $\frac{1}{2}$ inch thick, and these into any size and shape you please. Take equal quantities, in weight of fruit and sugar. Put the sugar into the preserving kettle with a gill of water for each pound. When the sugar is dissolved, put it over the fire, boil and skim it, then pour out and wash the kettle and return the syrup to it. Put in the fruit, and for each 5 pounds of it, $\frac{1}{4}$ pound isinglass dissolved in water, and boil the whole briskly until the fruit when held towards the light looks translucent, which will be in from $1\frac{1}{4}$ to $1\frac{1}{2}$ hours. Then take it out, a piece at a time, spread it on dishes and strain the syrup in a pan. When the syrup is lukewarm, put your fruit in the jars and pour it over. Let them stand till next day, then seal the jars.

This fruit may be flavored with lemons sliced and preserved with it; cut in thin slices and boil with the fruit. Put in one lemon to each three pounds of fruit. The citron melon makes a beautiful but tasteless preserve; it must be flavored with lemon,

orange or some other fruit. If, when it is a little cool, it should prove not sufficiently flavored, a few drops of flavoring extract may be added.

Citron Preserves.

The following makes one of the nicest preserves in the whole range of sweet meats. Try it and see:

Cut the rind in any form desired, boil hard for 30 to 40 minutes in middling strong alum water; then put them into clear cold water and allow them to stand over night. In the morning change the water and put them to boil; let them cook until they have entirely changed color, and are quite soft. Then make your syrup, allowing $1\frac{1}{2}$ pounds of white sugar to a pound of fruit;—then add your fruit, which needs but little more cooking. Mace, ginger or lemon flavor nicely.

Preserving Strawberries Without Sugar.

Strawberries preserved without sugar retain their original flavor better than when preserved in any other way. The following is the process:

Put the fruit in the preserving kettle, and if very dry, add a little water to prevent burning. Boil about three minutes, or just long enough to be sure the whole mass is thoroughly heated—not cooked. Dip into cans, filling them completely, seal quickly and set in a cool place. Glass jars containing fruit should be kept in a dark place or covered with dark colored paper. Open and sugar several hours before using.

To Preserve Plums.

The following method of preserving plums is vouched for by one well qualified to judge of such things, and who knows whereof she vouches:

Pick out all the unsound plums and stems, and then pour over them boiling hot, clarified syrup made of good brown sugar.—Let them remain in the syrup two or three days, then drain it off. Make it boiling hot, skim it and pour it over again; then let them remain a day or two, then pour it in a preserving kettle over the fire, and simmer gently until the syrup is thick and rich. One pound of sugar to each pound of plums. Put them in jars and secure the next day.

RASPBERRY PRESERVES.—If this delicious berry is

even moderately plenty, don't fail to supply yourself with the following preserve :

Choose raspberries not too ripe ; take their weight in sugar wet with a little water, and put in the berries ; let them boil gently, without breaking. When they are clear, take them up, boil the syrup until thick enough, then put them in again, and when cold put them away.

WHORTLEBERRIES FOR WINTER USE.—Whortleberries, gooseberries, plums and currants may be preserved for winter use, in this way :

Put the berries in a bottle, cork and seal it and place the bottle in a kettle of cold water and bring it gradually to a boil. As soon as it boils, take it from the fire and let it cool ; take the bottles out and put them away for winter use.

Pine Apple.

There is no more delicious preserve than this.—The following is the plan pursued by one of the best housekeepers in the country for preserving :

Select ripe pines, free from blemishes ; do not break them or remove the leaves ; put them in a large boiler or pan filled with water, and cover them tightly down. Boil them until they are sufficiently tender to run a skewer through them with ease, then take them up and let them get sufficiently cold. Peel them when cold, and cut them into slices. The slices should be $\frac{1}{4}$ of an inch thick. Take out the cores, weigh the fruit, and allow the same weight of the best sugar (granulated sugar). Spread a little on the bottom of the preserving jars, put in a layer of fruit, then a layer of sugar until it is all in. Let them remain until all the sugar is dissolved, then drain off the syrup and strain it. Set the jar in cold water ; let it remain till the water boils, then take it off ; in the water in which it was heated, put the syrup to heat at the same time as the fruit, only in a separate vessel, and pour it when boiling on the fruit ; put the pan on the fire again with the jar of preserves in it, and let it remain until the water boils. Cork the jar well, and seal as usual. Small jars are the best for this preserve.

Jellies.

The various jellies made from the different small fruits, enter largely into the calculations of every good housewife, in providing the year's supply of

sweetmeats, appetizers and condiments. We give information for preparing several of them.

RED CURRANT JELLY.—This is one of the most common, as it is one of the best of its class. The following mode of preparing it is reliable :

Gather the fruit when perfectly ripe, and on a dry day ; strip the currants carefully from the stems, put them into a jar, which place in a sauce-pan of cold water, over a clear fire, until the juice flows from them freely ; then turn them into a fine hair-seive, and let them drain well, but without pressure. Weigh the juice, and to each pound allow 10 ounces of loaf-sugar. Boil the juice fast for 13 minutes, then remove it from the fire ; add the sugar, keeping it stirred till it is quite dissolved. Give the jelly eight minutes more of quick boiling, and pour it into moulds. Be sure to clear off the scum both before and after the sugar is added, or the jelly will not be clear. The currants which remain in the sieve make an excellent jam, boiled with equal quantities of sugar for eight minutes.

CURRANT JELLY WITHOUT COOKING.—The following simple process of making currant jelly may be convenient for some :

Press the juice from the currants and strain it ; to every pint of juice put a pound of fine white sugar ; mix them together, until the sugar is dissolved, then put it into jars, seal them and expose them to a hot sun a few days.

Strawberry Jelly.

The following rule for making a most delicious strawberry jelly was communicated by Asenath Doan, of Athens, O., a noted housekeeper :

Take ripe, perfect strawberries, pick off the husks, place the berries in large (but not deep) dishes, saturate well with refined brown sugar, and set the dishes on the cellar floor to keep them cool. Early the next morning drain off the juice, being careful not to mash the berries. (I make pies of the berries and they are pretty good.) Stew the juice over a slow fire until it begins to thicken, then stir in as many cups of sugar as there are of juice ; keep it cooking slowly and well stirred, until the sugar is dissolved. I prefer a common stone milk crock to stew it down in. When a little cool, put it in glass tumblers, and when cold, cover tight with two or more thicknesses of white paper and keep in a cool, dry place.

ANOTHER.—Take strawberries when fully ripe, strain, and to each pint of juice add a pound of the best refined sugar. Boil briskly, skimming when necessary, for ten or fifteen minutes, or until it will jelly, which may be known by dropping in a little cold water. If done, it will fall to the bottom in a mass.

Blackberry Jelly.

Whoever tries this plan once of making a most palatable and healthy condiment, will be sure to try it again :

Gather the fruit when perfectly ripe, and in very dry weather. Put the blackberries into a jar, and place the jar in hot water, keeping it boiling until the juice is extracted from the fruit. Pass it through a fine sieve or jelly-bag without much pressure. For every pint of juice add fourteen ounces of sugar, and boil in a clean preserving-pan about twenty-five minutes, carefully taking off the scum as it rises to the surface. Place it hot in small jars, and cover it down with thin tissue paper dipped in brandy, and brown paper over it. Keep it in a cool, dry place.

Apple Jelly.

The apple is such a common fruit that many entirely overlook its adaptability to many of the nicer and finer sweet meats, and buy smaller and rarer fruits at enormous prices, that are no better. The following makes a very nice apple jelly :

Take a peck of nice juicy apples, pare and core them, put in a pan with two quarts of water ; boil them gently but not too much ; strain the juice through a bag or sieve ; to every pint add three-quarters of a pound of loaf sugar and the rind of a lemon pared very thin.

ANOTHER.—Core but do not peel the apples. To 2 pounds apples add 1 pint cold water. Boil gently with some lemon peel and the juice of one lemon, for one hour. Strain through a flannel bag. To each pint of juice add 1 pound of white coffee sugar and boil one hour.

ONE MORE.—The following is said to be the very best way of making apple jelly, and those who have not tried it should do so. It will last for years and has frequently been pronounced superior to currant jelly :

Take tart apples of the best quality and flavor, cut into quarter slices and steam them till soft, then strain out the juice which should be entirely free from any pulp. Boil to the consistency of molasses, then add 1 pound best crushed sugar for each pound of syrup, stirring constantly until the sugar is dissolved. Add 1 ounce extract of lemon for every 20 pounds of jelly, and when cold set it away in jars.

DRIED APPLE JELLY.—Dried apples prepared as follows make a very nice jelly :

Soak 1 quart dried apples over night in 1 gallon cold water, then boil till soft. Drain through a hair sieve, and add 1 pint of sugar to a quart of juice, then boil till it jellies. Two or three lemons cut in slices and put in when it begins to boil, will give it a nice flavor.

Lemon Jelly.

To make a delicious lemon jelly proceed as follows:

Pour 1 quart of boiling water on 1 ounce Cooper's isinglass, and then add $1\frac{1}{2}$ pounds loaf sugar and 3 lemons, juice and rinds grated. Mix, and then strain, add 1 pint of wine and set in moulds to cool.

Crab Apple Jelly.

Siberian crab apples make about as good jelly as any other fruit, if not the best. They have a very delicate flavor, and are a justly great favorite with housekeepers. The following is the best method of preparing them :

Pour them in a keettle with just water enough to cover them, boil $\frac{1}{4}$ hour, then take them off and rub them through a colander to separate the skins and seeds from the pulp, then strain through a flannel bag. To each pint of the juice thus strained, add a pound of white sugar and boil for 20 minutes, in the meantime skimming off the skum if there is any, then fill glasses or moulds and let them stand for 2 or 3 days in the sun until sufficiently hardened. Dip in brandy a piece of unsized or newspaper and lay on top of the jelly ; then paste over the top of the glass a piece of letter paper to keep out the air, and the jelly is ready to be put away for use.

ANOTHER.—Here is another shorter method, but is not quite as good :

Boil the apples with just enough water to cover them, until tender. Mash with a spoon, and strain out the juice. For a pint of juice take a pound of sugar, boil 30 minutes and strain through a hair sieve, and put in glasses as above.

Currant Jam.

To make nice currant jam, follow this rule :

Pick fine red currants free from stems. Strain the juice from half of them ; crush the remainder with $\frac{3}{4}$ pound of sugar for each pound of fruit used, and put them with the juice in a kettle and boil until it is a smooth jellied mass; have a moderate fire, that it may not burn.

Pine Apple Jam.

This is one of the delicacies that make one's mouth water to think of.

Peel and grate the apple; then for each pound of it put in one pound of sugar. Boil half an hour and put into jars.

Strawberry Jam.

Try the following if you want to have a most delicious jam on your table :

For every pound of strawberries take $\frac{3}{4}$ pound of sugar. The berries should be mashed in a preserving kettle, and the sugar thoroughly mixed with them. Boil from twenty minutes to half an hour, stirring constantly.

How to Keep Preserves, Jams, &c.

After the labor and expense of making up a quantity of sweetmeats, they are sometimes lost or much injured or deteriorated in quality by mold, or by souring and working. If your closet is dry and cool, your preserves, jellies, and jams may be kept for years by the following process :

Cut a piece of clean writing paper to fit the mouth of the pot or jar, and another about $1\frac{1}{2}$ inches larger. With a paste brush lay a coating of the white of an egg over the surface of the smaller paper, and lay it on the top of the jam etc., untouched side down. Take the larger piece and coat the under side with white of egg and cover the pot, glass or jar with it; the white of egg renders it adhesive, and pastes it firmly down all around the edge of the crack.

Blackberry Flummery.

A "Jersey Farmer's Daughter," who we know will make a capital "Jersey Farmer's Wife," furnishes the following as a rare dish :

Stew blackberries moderately sweetened with sugar or molasses, until soft ; mix a thickening of flour and water, and stir into the berries. Continue stirring while it boils, until the whole becomes incorporated into a mass just sufficiently thick to pour into moulds ; when cold turn out for dessert—to be eaten with milk or cream.

Strawberry Cream.

If you want a delicious and rare tit-bit, try the following :

Mash the fruit gently ; drain it on a sieve ; strew a little sugar on it ; when well drained without being pressed, add sugar and cream to the juice, and, if thick, a little milk. Whisk it in a bowl, and as the froth rises, lay it on a sieve ; when no more will rise, put the cream in a dish and lay the froth upon it.

Apple Snow.

Here are the directions for making a very nice dish which needs only to be tried to be admired :

Put 12 good tart apples in cold water, and set them on a slow fire ; when soft, drain off the water, strip the skins from the apples, core and lay them in a large glass dish. Beat the whites of 12 eggs to stiff froth, put half a pound of powdered white sugar to the apples ; beat them, and then add the eggs. Beat the whole to a stiff snow, and turn into a dessert dish.

Apple Biscuit.

The following makes a very delicate and palatable item for dessert :

Boil apples in water until soft, then take them out and rub them through a wire sieve, flavor with a drop or two of essence or oil of lemon, and if you like the taste, a drop of the oil of cloves. Add lump sugar equal in weight to the pulp, and grind with it ; roll the sugared pulp into flat cakes about a quarter of an inch thick, and cut them into shapes. Finally, dry them in a very slow oven, the heat not being strong enough to bake them or melt the sugar ; they may be dried also by the summer's sun. They often require to be partially dried before they can be rolled out. They may, instead of rolling, be dropped on paper, or put in a ring of paper upon a slightly greased iron plate.

Gooseberry Fool.

This does not mean the young man who told his sweet-heart he was "some, on geeseberry pie," but one of the most delicious nic-nacks that can be made out of gooseberries.

Pick and wash one quart of gooseberries ; put them into a stone jar, and having covered it, let it stand in a sauce-pan of boiling water until the gooseberries are quite tender, and then pulp them through a horse-hair sieve. Beat up the yolks of two eggs and the white of one. To these, add by degrees, a small quantity of milk and a little pounded sugar. After this, put in the pulped fruit, whisk it all up, and add gradually, half a pint of cream, (or milk, if cream be not plentiful), and sugar to taste.

Float.

The following makes a palatable and economical dish for tea :

Take 1 quart of new milk and 5 eggs : beat the whites to a stiff froth, have the milk ready boiling in a skillet and with a spoon place the whites in it, turn them over quickly, then lift them out carefully, and place them on a plate. Now beat the yolks well, add 1 large spoonful flour, 2 tablespoonfuls of sugar and some grated nutmeg or lemon, and 2 spoonfuls of cold milk ; stir them all together, then pour it into the milk, stirring it too keep it smooth. Let it boil, turn it out in a deep dish, place the whites on it, and it is now ready for use. A few drops of jelly or colored sugar on the whites, improves the looks.

Egg Puffs.

Try this if you want something new and nice.

Take 1 pint sweet milk, 1 quart sifted flour, 2 eggs, 1 teaspoonful salt. Mix the yolks with the milk. Beat the whites to a froth. Mix all together and divide into twelve earthen cups.— Bake 20 minutes in a very hot oven, and eat as soon after as possible with good butter. The cups must be new, or those which have never been wet or greased. The puffs when done will slip out of the cups easily, and are served at table, bottom side up, for beauty. The cups may be cleaned sufficiently by scraping and wiping with a dry cloth. If the cups are ever wet the puffs stick.

Florentines.

These form a nice dish for supper, and are delicious. Try them if you want something a little ex-

tra to surprise and treat your friends at the same time, when they come to take tea with you :

Roll puff paste to the thickness of an eighth of an inch, and lay it on a thin baking tin. Spread over it a layer of preserves or jam, and bake it in a moderate oven. Take it out and when partly cool, having whipped some whites of eggs with sugar, put the whip over the preserves and strew some minced almond all over the surface, finishing with sifted sugar. Put it once more into the oven till the whip is quite stiff. The florentines should be of a pale color; and a few minutes after the paste is finally removed from the oven it should be cut into diamonds and served.

Sorghum Apple Sauce.

The following when cold makes a good substitute for apple butter, and besides it is really a good sauce:

Put a pint of sorgo syrup on to boil, and then beat 3 eggs to a froth. As soon as the syrup boils, pour in the eggs, stirring rapidly all the time. Let it boil 3 minutes, then pour it into a cool dish, and stir in a little good vinegar, or lemon juice.

Fine Puff Paste.

Try the following :

One pound of fine flour, 1 pound of best butter, a teaspoonful of salt, the yolk of 1 egg, and a teacup of water. With the water and egg, and as much butter as it requires, mix up the flour in a smooth mess. Roll it out and spread it over thinly with butter. Fold up your paste and roll it out again; repeat this till your butter is exhausted. Roll out rather thin bottoms for your pies, and a half inch thick for your top crusts. Plainer crusts have simply less butter in them.

Oatmeal Custard.

The following will be found very grateful and soothing in cases of colds or chills :

Take 2 tablespoonfuls of the finest Scotch oatmeal; beat it up in a sufficiency of cold water in a basin to allow it to run freely. Add to it the yolk of a fresh egg, well worked up; have a pint of scalding new milk on the fire, and pour the oatmeal mixture into it, stirring it round with a spoon, so as to incorporate the whole. Add sugar to your taste, and throw in a glass of sherry to the mixture, with a little grated nutmeg. Pour it into a basin, and take it warm in bed. Some persons scald a little cinnamon in the milk.

Good Bread.

One of the greatest promoters of "joy in the household," next to a good natured baby, is good bread. To know how to make it, is one of the rare accomplishments of a good housewife. Good, light bread is the "staff of life," but bread that is sour, heavy, or not baked right, is both unhealthy and the promoter of discord, difficulty and dyspepsia. But, to be a good bread maker requires patience and practice. How necessary then, that every mother should learn her daughter this art. To be a good piano player is a great accomplishment, even for a farmer's wife, but it will not compare with that of being a good bread maker. Bread made after the following recipe is sure to be as light as baker's bread and much sweeter and will keep moist longer than that made by any other method, and has frequently taken the first premium at State and county fairs:

Mix 1 pint of flour with 1 quart of boiling clabber milk; add 4 tablespoonfuls of yeast when sufficiently cool not to scald it; gradually work in flour and knead well: let it rise over night, or until very light; work in 2 teaspoonfuls of soda dissolved in warm water; form into loaves, let them rise again and bake slowly. Be careful not to bake too much. Good bread is frequently spoiled by too much baking.

ANOTHER.—Here is another formula for making two loaves of good bread:

1 quart warm water, or better, 1 pint water and 1 pint new milk, mixed with flour to a thick batter, $\frac{1}{2}$ cup yeast. Set at night.—In the morning mix and mould well, setting again to rise. When light, re-mould and put into pans for baking. If tender crust is desired, wrap the bread in a towel wrung out of cold water, and this again in a dry towel, immediately after taking out of the oven.

STILL ANOTHER.—Take equal quantities of good new milk and boiling water; stir in flour until considerably thick, (less so than fritters,) keep in a warm place (where they will remain at about the same temperature as when first made) until they have risen; then add as much warm milk (half water will answer) as you will have emptyings; add a teaspoonful of saleratus; mix not too hard; put in tins and let rise; then bake in a moderate oven one hour, and you will have *beautiful* bread. Care should be taken that the bread does not rise too much before baking, else it will not be so good.

Graham Bread.

Good Graham bread is of itself an anti-dyspeptic, but as it is too often made, the greater healthfulness is not a sufficient inducement for the family to eat it when they can get any other. Almost as soon as it is cold, it becomes hard and tasteless. Bread made as follows will be preferred to fine wheat bread by many. The ingredients given are calculated for two loaves:

Take 3 pints of warm water (sweet milk is better), 1 teaspoonful of salt, a teacup $\frac{2}{3}$ full of good hop yeast, and make a sponge as in fine flour bread. Keep in a warm place, and when light, work in a piece of pulverized soda the size of two peas, and Graham flour to make it just moist enough to cleave to the dish.—Let it rise again in the same pan; when very light, sprinkle flour on the moulding board and mould into two loaves; when this rises again, bake from 50 to 60 minutes. The Graham flour requires soda when it is unnecessary for fine flour bread. Add 3 tablespoonfuls of molasses in making the sponge, if you think it improves the flavor.

Steamed Corn Bread.

The following makes a very palatable and healthy change from wheat bread:

Mix thoroughly 1 cup of sweet, and 2 of sour milk, 3 of corn meal, 2 of flour, 1 of syrup or molasses, and 1 teaspoonful of soda. Place it in a pan and steam it over boiling water steadily for 3 hours.

Lime Water Instead of Soda.

Sometimes bread by standing too long before ba-

king becomes sour. Lime water is said to be better than soda for correcting acids in dough. An old housekeeper says :

I slack a small piece of lime, take the scum off of the top and bottle the clear water, and it is ready for use. A bottle full will last all summer. Two or three tablespoonfuls will entirely sweeten a batch of rising sufficient for four or five large loaves.

Rye and Indian Bread.

This is the regular "stand-by" with our Yankee cousins "down east," but has not yet come to be fairly appreciated "out west." The following is the way our grandmother made it :

Take about 2 quarts indian meal and scald it; then add as much rye meal, a teacup of molasses and a half pint of lively yeast.— If the yeast be sweet, no saleratus is necessary. If sour put in a little. Let it stand one or two hours till it rises; then bake it about three hours.

Light Biscuit.

If there is one thing that more than another causes the good housewife to be anxious, it is that her biscuit may be light, sweet and white. The following is the way to make that kind :

Take 2 pounds flour, a half pint of butter milk, half a teaspoonful of saleratus; put into the buttermilk a small piece of butter or lard rubbed into the flour; make it about the consistency of bread before baking.

Bread Biscuit.

Everybody likes *good* bread biscuit, and if made after the following rule they will please everybody :

Take 3 pounds flour; half a pint indian meal, a little butter, 2 tablespoonfuls lively yeast; set before the fire to rise over night; mix it with warm water.

Hot Rolls.

There is a sort of magic about the name that

makes one hungry. Made after the following rule, they will meet the anticipations of an ordinarily vivid imagination :

Warm 1 ounce butter in half pint milk and add $1\frac{1}{2}$ spoonfuls of yeast and a little salt. Mix the above with 2 pounds flour.— Let it rise an hour or over night in a cool place ; knead it well, add $\frac{1}{2}$ teaspoonful saleratus, and make into seven rolls, and bake them in a quick oven.

Hot Cross Buns.

These will be found delicious :

Rub $\frac{3}{4}$ of a pound of butter into 2 pounds of flour, then add $\frac{1}{4}$ of a pound of moist sugar. Mix well together with the above 1 pint of new milk made warm, 3 well beaten eggs, 1 tablespoonful of yeast and a teaspoonful of carbonate of soda.

Lemon Tea Cake.

Rub $\frac{1}{2}$ pound of butter into a pound of flour; add $\frac{1}{2}$ pound of finely sifted sugar and 2 eggs, grate the rind of 2 lemons and squeeze in the juice of one. Mix all well together, roll out the paste, cut into shapes and bake in a slow oven.

Real Old Fashioned Short-Cake.

Who does not remember the old fashioned short cake, that our mothers or grand mothers used to make when we had visitors. Sometimes the short cake would not be *short* at all, and then the number of excuses that would be made ! Short cake made after the following directions will not be like the short cake that Jonathan's aunt made when he made her a visit. He remarked that his aunt made some short cake but he "thought it had three weeks' length'nin into it !" You may be sure there will be no lengthening in this.

First sift the flour, the amount depending upon the number to be fed. For half-a-dozen hearty eaters, say $1\frac{1}{2}$ pounds of flour. Make a funnel of the middle of the pan or bowl of flour, pour into it a quart of sour milk, warmed but not heated. Dissolve a

tablespoonful of salt in a little water, stir it into a pint of rich, sweet cream, if you are in a cream country, and have it in plenty, if not, use clean fat drippings that have been cooked. *Never* put raw lard or butter into a short cake. Pour the shortening, warmed, into the funnel, and stir the whole together until thoroughly incorporated in a very stiff batter. Then dissolve a dessert spoonful of refined saleratus in a few spoonfuls of water, and stir it until it pervades the entire mass equally. Put the batter into well greased pans, an inch thick, bake in a moderately hot oven 30 to 40 minutes, and the result will be a genuine, good, old fashioned short cake.

ANOTHER.—Here is another short cake that may be still older fashioned, the method of baking is certainly more primitive, but we doubt if they were as good:

One quart of buttermilk, 1 tablespoon of lard, (unmelted); salt to taste; roll out; make diamonds with a fork, and place in a spider and set before the glowing coals of a fire-place.

Healthy Pie Crust.

The following makes not only an excellent but a healthy pie crust:

One cup of sour cream; half cup of lard; tablespoon of salt. Rub the lard and salt through the flour; add half teaspoon of soda to the cream, and wet up as you would with water.

Strawberry Short Cake.

This is a favorite dish with everybody and a recipe for making a good strawberry short cake like the following is worth more than double the amount paid for the book:

Into 3 pounds of flour rub, dry, 2 teaspoons heaping full of cream tartar; add $\frac{1}{4}$ tea cup of butter, a little salt, 1 teaspoonful of soda dissolved in a pint of milk and water. Mix quickly and thoroughly, roll to an inch in thickness, and bake 20 minutes in a quick oven.

Take a quart of strawberries and add cream and sugar to make a sauce. For this purpose small sized, rather acid berries, with sprightly flavor, are preferable.

When the short cake is done, divide in three layers, butter them, and spread the strawberries between. Eat while warm.

Raspberry Shortcake.

All that was said in reference to strawberry shortcake, might be said here :

Mix dough as for biscuit ; roll it thin as pie crust and cut in sheets the size of a bake tin. Place one of these in the tin, then a layer of ripe raspberries, then more dough, and so on for three layers of dough and two of berries. Cut small holes in the top crust, pour in a little water, and lay on a few small lumps of butter, and bake half an hour. Serve with sweetened cream.

MOLASSES JELL CAKE.—Don't fail to try this :

Take 3 eggs, 1 cup of molasses, 1 teaspoonful of soda, 2 of cream tartar, 2 or 3 tablespoonfuls of new milk, 2 cups of flour ; stir all well together, then grease the dripping pan, and spread the mass upon it evenly, and bake 15 minutes. Smear it with the jelly while hot, and put away to cool.

Waffles.

Waffles rightly cooked make a fine breakfast dish. The following are the proportions and ingredients for making them :

Take 4 eggs, 1 quart milk, $\frac{3}{4}$ pound butter, salt ; flour to make a thin batter. Butter the dish well and bake quickly.

WAFFLES WITH YEAST.—1 quart warm milk, 1 ounce butter, 3 eggs, 1 gill yeast, tablespoon of salt, and flour enough to make a stiff batter. Let it rise over night.

CRUMPETS.—Take 2 pounds of flour, 1 gill yeast, milk and water to make a stiff batter. Let it rise six hours, and bake in muffin rings.

Muffins.

Everybody ought to know how to make muffins, and they might be made much oftener than they are, as a general thing, as they add so much to the resources of the breakfast table. The following makes very excellent muffins :

Melt $\frac{1}{2}$ a teacup of butter in $1\frac{1}{2}$ pints of milk : add a little salt, 1 gill of yeast, and 4 eggs. Stir in flour enough to make a batter rather stiffer than for griddle cakes. Keep in a moderately warm place to rise 8 or 9 hours.

CREAM MUFFINS.—These should be baked in cups, which are kept especially for the purpose, and never wet or greased, but wiped clean with a dry cloth, that the muffins will not stick; after a short time they will shine like varnish on the side next to the cup. Mix 1 pint sour cream, (but not very sour,) 1 pint flour, 3 eggs, 1 teaspoonful salt, $\frac{1}{2}$ teaspoonful soda or saleratus, whites and yolks of 2 eggs beaten separately. Stir in the whites the last thing.

WATER MUFFINS.—These should be baked in rings filled about half full.

Take 1 quart flour, $\frac{1}{4}$ teacup yeast, 1 tablespoon salt, and warm water enough to make a thick batter; beat it with a spoon. Let it rise 8 hours, and bake 15 to 20 minutes.

MORE MUFFINS.—“There’s luck in odd numbers, says Rory O’Moore,” but we think there’s more luck in even numbers, and so add one more way of making muffins:

Take 1 quart new milk, 2 eggs, 2 tablespoonfuls yeast, butter the size of an egg. Warm the milk, and mix with other ingredients at night; in the morning turn into muffin rings, or drop on tins, and bake a light brown. To be eaten with butter for breakfast.

Good Biscuit.

We are not as fond of biscuit as many people, and think there would be less dyspepsia and indigestion if there was less hot bread of any kind eaten, but all this matters not, so long as people will have the “hot biscuit and butter.”

Take 2 teaspoonfuls cream tartar, 1 of soda and $\frac{1}{2}$ teaspoonful salt, all rubbed fine and mixed with 1 quart of flour. Rub in a piece of butter the size of an egg; mix up soft with thick sour milk or buttermilk, and bake quickly.

Rice Breakfast Cakes.

Try the following; it is more healthy than biscuit:

Soak $\frac{1}{2}$ pound rice over night. Early in the morning boil it very soft, drain off the water, and mix with it $\frac{1}{4}$ pound of butter;

set it away to cool. When cold, stir in a quart of milk and add a little salt. Stir in $\frac{1}{2}$ dozen eggs well beaten, and $\frac{1}{2}$ pint sifted flour, one after the other. Beat the whole well, bake on the gridle in cakes about the size of a small dessert plate. Butter them and send to the table hot.

Good Rusk.

Good rusk! "Aye, there's the rub!" Of those who know how to make *good* rusk, it cannot be said, "their name is legion," but it may be, if every body will buy this book and make their rusk after the following recipe:

Take enough bread dough to fill a quart bowl, 1 teacup of melted butter, 1 egg, 1 teaspoonful of saleratus; knead quite hard, roll out thin, lap it together,, roll to thickness of a thin biscuit; cut out with biscuit mold, and set in a warm place to rise, 20 to 30 minutes. Bake them and dry thoroughly through, and eat them with your coffee. They may be made with hop yeast, and sweetened.

ANOTHER.—One pint of milk, 1 teacup of yeast—mix it thin; when light, add 12 ounces of sugar, 10 ounces of butter, 4 eggs, and flour sufficient to make it as stiff as bread. When risen again, mold and spread it on tin.

EGG RUSK.—The following makes a nice rusk:

Beat 6 eggs with 1 pound sugar, and add 3 ounces butter melted in 1 pint of milk. Mix these with flour enough for a batter, and add 1 gill of yeast and a half teaspoon salt. When light, add flour and mold. Make into small cakes and let them stand a short time to rise, and then bake.

Breakfast Cake.

Here is something nice for breakfast, with which if you have a fragrant cup of coffee and a boiled egg, you will not go hungry:

Take 1 quart sifted flour, 1 tablespoonful of butter, 3 teaspoonfuls of baking powder, (which is soda and cream of tartar properly combined,) mix these thoroughly into the flour with a tablespoonful of sugar, then add 2 well beaten eggs, and sweet milk sufficient to form a thin batter. Bake in a moderately hot oven.

ANOTHER BREAKFAST CAKE.—3 eggs, 3 cups of wheat flour, 3 cups of unbolted flour, a little salt, 1 quart of milk. Bake quick. Some use sour cream and soda instead of sweet milk.

A Nice Breakfast Dish.

The following makes a very palatable dish for breakfast, besides being economical in saving the dry bread :

Slice a few cold biscuit, or some dry, light bread ; fry them slightly in a little butter, or nice gravy. Beat 3 or 4 eggs, with half a teacup of new milk, and a pinch of salt. When the bread is hot, pour the eggs over it, and cover for a few minutes; stir slightly, so that all the eggs may be cooked.

Indian Corn Cake.

There is no better breakfast cake than one made of nice corn meal, light, soft and sweet, as they should be. We give two or three ways of making them, all good. The first is the process of a Connecticut Yankee housekeeper :

Mix together 2 cups of flour, 1 of Indian meal, 2 teaspoonfuls cream of tartar, 1 teaspoonful soda, and a little salt ; add to this 1 egg and 2 tablespoonfuls of sugar beaten together, 2 cups of milk, and a piece of butter the size of an egg. Bake until it is thoroughly cooked through.

ANOTHER.—Take 1 quart sour milk, 2 teaspoonfuls of saleratus, 4 ounces of butter, 3 eggs, 3 tablespoonfuls of flour and corn meal sufficient to make a stiff batter.

ANOTHER AND BETTER.—Take 2 cups Indian meal, 1 cup flour, 2 eggs, large teaspoonful melted butter, 2 small teaspoonfuls of cream tartar, 1 small teaspoonful soda, 1 large spoonful brown sugar dissolved in milk—of which add enough to make it as soft as ginger bread.

Corn Dodgers.

This is the most primitive form of the Indian corn meal cakes, except perhaps the "hoe-cake." Here is a good specimen of the "dodger" family :

Take 3 pints of unsifted yellow corn meal, 1 tablespoonful of lard, and 1 pint of milk ; work all well together, and bake in cakes the size of the hand, and an inch thick. To be eaten hot, with butter, molasses, or both, as preferred.

Crackers.

J. B. Kupfer of this city makes the very best crackers that we ever ate, but of course we cannot promise to give the recipe he uses in making them. Here is the way to make a very excellent cracker:

Take 1 pint of water, 1 teacup of butter, 1 teaspoonful of soda, 2 of cream of tartar, flour enough to make as stiff as biscuit. It will not need pounding. Let them stand in the oven until dried through.

BUTTER CRACKERS.—Here is something better than the above:

Take 10 cups flour and 1 of butter, 1 teaspoonful of soda, and 2 of cream tartar, with water enough to form a very stiff dough;—rub the butter and cream of tartar through the flour, and dissolve the soda in the water, roll thin and bake quickly. With these crackers and vegetable oysters we make oyster soup.

ANOTHER.—For 2 quarts of flour, 1 cup of butter, and 1 teaspoonful of salt. Rub thoroughly together and wet up with cold water. Give it a good beating, and beat in flour to make quite brittle and hard. Break off pieces and roll out each cracker by itself.

Mock Oysters.

There are several ways of making mock or artificial oysters, that answer very well, for those who are not partial to the veritable bivalve. Here is one:

To 3 grated parsnips add 3 well beaten eggs, 1 teacupful of sweet cream, 1 tablespoonful of butter, 3 tablespoonfuls of flour, a little salt, and fry them the same as griddle cakes.

Here is another:

ARTIFICIAL OYSTERS.—To a pint of grated green corn add half cup of milk, 1 egg, small piece of butter, pepper and salt to suit the taste, 3 tablespoonfuls of flour; cooked as griddle cakes.

STILL ANOTHER.—Grate as many ears of green corn as will make 1 pint of pulp; add 1 teacup of flour, $\frac{1}{2}$ teacup of butter, 1 egg and pepper and salt to suit the taste. Drop and fry in butter.

Vegetable Oyster.

A great many people raise vegetable oysters or salsify in their gardens, who make no use of them simply because they do not know how to cook them. But it is a really luxurious vegetable, and pays as well for raising as any other in the garden. Cook as follows :

Slice 2 quarts of salsify and boil 2 hours in milk and water ;— then add 1 cup of butter, 1 of sweet cream, with pepper and salt to taste. Toast some thin slices of bread a delicate brown, place them in small dishes or platters, and pour the oysters over them and serve.

Egg Plant.

This is another product of the garden that most people know better how to raise than to cook. The egg plant fruit is a real luxury when rightly cooked. Try this way :

Peel and slice the plant, soak in salt and water 10 minutes, then steam five minutes. Make a batter of 1 pint of sweet milk, $\frac{1}{2}$ a cup of butter, 2 eggs, 1 teaspoonful cream of tartar, $\frac{1}{2}$ teaspoonful of soda. Mix with flour to the consistency of batter cakes; dip the slices and fry in butter to a light brown. We call them delicious.

Green Corn Stew.

There are several nutritious and delicious dishes which may be gotten up from green corn. The primitive way of gnawing it from the cob is the poorest way of all. Cooked in the right way it is healthy, and the reason why it is injurious to some persons, is because they eat so many things with it.

If you desire a delicious dinner, take 12 ears of green corn, split the kernels, and cut them from the cob, put the cobs in a porcelain kettle, cover them with cold water, and boil them an hour. Take out the cobs, scrape the chit from them with the back of a knife, and return it to the kettle and pour in the corn, add

more hot water if thick, and boil $\frac{3}{4}$ of an hour. Then put in a pint of milk and some pepper; as soon as it boils up remove it from the kettle, add butter and salt to suit the taste. These last mentioned ingredients must not be put in while over the fire, for they will cause the milk to curdle.

Green Corn in Winter.

A good many people cut green corn from the cob then lay it on plates or tins and dry for winter use; that is a good way, but this is better:

Take sweet corn, when tender and full of milk, scald it well by pouring boiling water upon it, then cut it off the cob and pack in water tight vessels, stone jars are the best, a layer of corn about two inches thick, and sprinkle over it a thin layer of coarse table salt; then alternately another layer of corn and salt until the jar is full; after which put on a cover to fit the jar, and place a stone or other heavy weight upon it. It will draw its own pickle, and the weight will keep it covered. As many jars as needed can be packed in this way. When wanted for use, soak it over night, putting a little soda in the water to soak it in, and while cooking add a very small quantity, to suit the taste, of loaf sugar. Corn prepared in this way can hardly be distinguished from that picked fresh from the garden.

Chicken Corn Pie.

The following is something new, and out of the common run of dishes, but is nevertheless vouched for as being excellent. It certainly smacks of goodness, if not epicureanism:

Prepare two chickens as for frying; then put them down and let them stew in a great deal of good, rich, highly seasoned gravy, until they are just done. Then have ready picked 2 dozen ears of green corn; take a very sharp knife and shave them down once or twice, and then scrape the heart out, with the rest already shaved down; then take a bake pan, (a deep one); place a layer of corn on the bottom of the pan, then a layer of the chicken, and so on until you get the chicken all in. Then cover with corn, and pour in all the gravy, and put a small lump of butter on the top, and set it to baking, in not a very hot oven. As soon as the corn is cooked it will be ready to send to the table. It can either be sent in the pan it is baked in or turned out into another dish. Have plenty of gravy or it will cook dry.

Pop Overs.

What's in a name? These pleasant breakfast

cakes would hardly attract anybody's notice under a less "taking" name. They are good.

Take 4 cups flour, 4 eggs, 4 cups milk, a piece of butter the size of a small hen's egg, melted, and $\frac{1}{2}$ teaspoon salt.

Corn Meal Crullers.

These are a western invention, and like most western things, they are decidedly good.

Beat 4 eggs light, and pour on them 1 quart of sour milk (if sweet milk, cream of tartar must be used); add half a teaspoonful of salt, and a small teaspoonful of soda; stir them all together, and then stir in sifted corn meal enough to make a very stiff batter. Have ready a frying-pan, half full of hot lard, into which drop the batter from a spoon; when nicely browned, turn them over, and when done, lay them on a collander to drain, and send to the table hot.

Wedding Johnny Cake.

The following makes a large, delicious cake, and need not be limited to the demands of Hymen only, or we fear that somebody would want to get married every other week.

One pint of sour cream, same of sweet milk, half cup of butter, 3 eggs, tablespoon of salt, same of soda, 1 quart of meal, 1 pint of flour, 1 pint of raisins, $\frac{1}{2}$ pint citron. Bake in a six-quart tin pan one hour.

Savory Toast.

"Toast and coffee" are proverbial for breakfast. The quality of the toast may be varied much by a little pains. When you tire of plain dried and scorched pieces of bread covered over with half-melted butter, and hard enough to break your teeth, try the following:

Put a piece of butter the size of a walnut into a sauce-pan, a dessert spoonful of mustard, a wine glass of vinegar, a dessert spoonful of anchovy sauce, some pepper and cayenne, and a quarter of a pound of cheese broken into pieces. Stir it well until dissolved, when spread on toasted bread.

Buckwheat Cakes.

There is nothing healthier or more palatable for winter use than buckwheat cakes, or in the primitive vocabulary, "flapjacks," griddle-cakes, etc. Some poetical genius says, "When one comes in from his out-door labor, with his inward man cramped and chilled with the icy breath of winter, what gives him more whole-souled satisfaction than to see a pretty, smiling wife loading the table down with great piles of buckwheat cakes, hot and steaming from the ample griddle."

Use a stone vessel; take about 2 quarts of warm water, and a pint of sweet milk, a little salt, and a teaspoonful of good hop yeast; stir in flour until you have good batter. Let it rise until quite light, then bake on a griddle. Leave about a pint of the batter, to raise the next batch, and you will have better cakes afterwards than at first. You will set at night, just before retiring, and have nice, light cakes for breakfast.

Here is another:

First, start the cakes to rising, by mixing them with light emptings, warm water and buckwheat flour, letting it stand to rise. Just before baking, put in saleratus enough to sweeten it. Then what cakes there are left after baking, put to soak in warm water, and when soft, mix in (adding more warm water) more salt, and more flour. Thus there is nothing lost, and the cakes are much improved.

Fritters.

The following is one plan for making choice fritters. We think there is nothing better.

Beat 10 eggs thoroughly, mix with 2 quarts cold water, 1 teaspoonful salt, add flour to make a batter the thickness of griddle cakes; fry by the tablespoonful in fresh, hot lard. Excellent, especially if eaten with maple molasses.

FRITTERS OF CAKE AND PUDDING.—Cut plain pound or rice cake into small square slices half an inch thick; trim away the crust, fry them slowly a light brown, in a small quantity of fresh butter, and spread over them when done a layer of apricot jam, or of any other preserve, and serve them immediately. These fritters are improved by being moistened with a little good cream

before they are fried ; they must then be slightly floured. Cold plum pudding sliced down as thick as the cake, and divided into portions of equal size and good form, then dipped into batter, and gently fried, will also make an agreeable variety of fritter.

Use for Broken Cakes.

'The careful housekeeper will always be anxious to "save the pieces." All pieces and fragments of cake may be economically used as follows :

Cut the pieces in thin slices, lay in a deep dish, and pour over it a custard made as follows : Beat the yolks of 3 eggs with 2 tablespoonfuls of sugar, add 1 pint of milk and season as liked.—Put it in a covered pail, set in a kettle of boiling water ; when it has thickened, stir in the whites of the eggs beaten to a froth, then pour on to the cake. Soft molasses ginger cake is very good, treated in this way. Several kinds of cake may be used in the same dish.

Omelet.

There are few better or more palatable dishes for breakfast than an omelet. Make it as follows :

12 eggs, beaten as for custard, 1 cup of sweet, thick cream, a little salt ; have your spider well buttered, pour in your mixture, set it over a slow fire, stir it occasionally until it thickens, pour immediately into a deep dish.

ASPARAGUS OMELET.—The following will be found a very nice breakfast dish :

Steam 2 pounds of freshly cut asparagus until it is tender : chop fine and mix with the yolks of 5 and the whites of 3 eggs, well beaten, and 2 tablespoons of sweet cream ; fry and serve quite hot. If you have not the conveniences for steaming, the asparagus may be boiled in as little water as possible.

ANOTHER OMELET.—Here is an omelet that many prefer to the above :

Take 4 eggs, 1 tablespoonful of flour, 1 cup of milk, and a little salt. Beat the whites of the eggs separately and add to the above (which should be well stirred together), just before cooking.—Butter a spider well, and when hot pour in the omelet. Cook very slowly on top of the stove and keep the vessel covered.

Oyster Toast.

The following makes a savory dish, tempting to almost any appetite :

Take 20 oysters, chop them small and add 1 anchovy bruised fine, and as much cream as will make them of a good consistency. Put all into a saucepan, add a little cayenne pepper. When quite hot, spread on hot, well buttered toast, and serve hot.

Scalloped Oysters.

The "delicious bivalves" can hardly be cooked in a more tempting style than the following:

Strain your oysters, and put a layer of them on the bottom of your dish with bits of butter, salt, pepper and a very little mace; spread over them a layer of baker's bread (at least three days old), grated; then a layer of oysters with the seasoning and a layer of grated bread. Fill the dish in this way having a layer of bread on top. Pour in a cup of the liquor of the oysters, and bake one hour. Don't have your layers of bread too thick.

Some prefer rolled crackers to the grated bread.

Either way "will pass."

Fish Chowder.

To know how to make a regular epicurean Fish Chowder is considered by some a *sine qua non*—an incomparable accomplishment. Anybody can take the following directions and make a chowder that will make a "fishing party" "roughing it in the bush," fairly smile as they come in from their laborious sport. "Chowder Parties" are an institution of the northwest, wherein any number of ladies and gentlemen, in the waning summer, pack up the necessities and pitch their tents in some romantic spot upon the shore of some one of the innumerable small lakes, set like mirrors among the low hills, or on the edge of the spreading prairie, for a few days' fishing, hunting and recreation. The following will make a chowder "all your fancy painted it," and more too:

The best fish for chowder are black and striped bass, pickerel, haddock, etc. Take 6 or 8 good sized slices of salt pork, put them in the bottom of an iron pot, and fry them till crisped.—Take out the pork leaving the fat; chop the pork fine. Put in the pot a layer of fish, cut in pieces an inch thick and 2 inches square, a layer of split crackers, some of the **chopped pork**, a little chopped onion, and then another layer of fish, split crackers, and seasoning. Do this till your pot is nearly filled. Then just cover the fish with water and stew slowly till it is tender. Take out the fish and put in the dish you intend to serve it in, and set it where it will keep warm. Thicken the gravy with powdered cracker; add catsup if you like. Boil up the gravy once and pour over the fish; squeeze in the juice of a lemon. Add salt if necessary.

Chicken Salad.

There is nothing more appropriate and few things more common as a basis of refreshments where they are to be “handed round” for an evening party, than chicken salad. It is considered not only palatable, but a luxury. The following ingredients are calculated to make salad for twenty persons:

Take 10 pounds chicken before it is cooked, and 4 bunches of celery; beat the yolks of 1 dozen eggs stiff, and add $\frac{3}{4}$ of a bottle of sweet oil, beating all the time; add salt, pepper and mustard, mixing these with some vinegar. When all are beaten in, and just before pouring on to the chopped chicken and celery, add $\frac{1}{2}$ cup of cold water to whiten the dressing; add also very slowly the well-beaten whites of the eggs. Cut the boiled chicken with a knife and do not chop it, also cut the celery with a knife. Do not pour the dressing on to the chicken and celery until just before serving it.

Chicken and Turkey Patties.

The following makes a very good dish besides using up the fragments:

Mince some cold chicken or turkey; put to it some of the gravy, or, if you have none, line your pie-dish with a paste; put in your minced meat; work some flour and butter together, and lay bits all over the meats; then nearly fill the dish with water;—season with pepper and salt, and, if liked, a little ground mace; cover with a nice paste, and cook till the paste is done.

To Bake Shad.

Shad, baked in this style is capital. Try and see.

A layer of shad and one of pepper and allspice ; also a very little whole mace, and so on until the stone jar or pan be filled.—Cover it with vinegar, tie over it several thick sheets of paper, send it to the baker and let it stand in the oven over night.

Codfish Balls.

The following will make a dish that every lover of fish will call delicious :

Cut up your fish in small pieces and soak in warm water until fresh. Pare and boil some potatoes, mash fine ; take two-thirds fish, one-third potatoes, and mix well together ; season with pepper and a little butter ; make them in balls, roll in flour and then fry in butter until brown.

Potato Dumpling.

The following unique dish will be found to possess virtues of its own :

Peel some potatoes and grate them into a basin of water ; let the pulp remain in the water for a couple of hours, drain off and mix with it half its weight of flour ; season with pepper, salt, chopped onions and sweet herbs. If not moist enough, add a little water. Roll into dumplings the size of a large apple, sprinkle well with flour, and throw them into boiling water.—When you observe them rising to the top of the saucepan, they will be boiled enough.

Egg Dumplings.

• Try the following for a change :

Make a batter of a pint of milk, 2 well beaten eggs, a teaspoonful of salt, and flour enough to make as thick as for pound cake ; have a clean sauce-pan of boiling water, let the water boil fast, drop in the batter by the tablespoonful ; four or five minutes will boil them ; take them with a skimmer on a dish, put in a bit of butter, and pepper over, and serve with boiled or cold meat. For a little dessert put butter and grated nutmeg, with syrup or sugar over.

EGG DUMPLINGS FOR SOUP.—The following is vouched for by one who knows it to be good :

To half a pint of milk put 2 well beaten eggs ; add as much flour as will make a batter rather thicker than for pancakes, and a little salt ; drop a tablespoonful at a time into boiling soup.

Baked Apple Dumplings.

This dish is not as often served as it used to be when we were younger than we are now :

Prepare a paste as for boiled dumplings, only instead of one large one, make several small ones ; avoid lapping the paste, as much as possible, after the fruit is introduced ; butter the pan in which they are baked, to prevent their sticking ; lay the folded side down ; bake three-quarters of an hour, and serve hot ; eaten with cream.

STRAWBERRY DUMPLINGS.—Crust to be made the same as directed for shortcake ; roll half an inch thick ; put about a gill of strawberries for each dumpling. Bake, steam or boil for half an hour.

To Cook Peas.

The common way is to pick the peas when it is time to cook them. The following is a better way :

Gather and shell the peas at night, and put them in cold water, in which you have previously thrown a handful of salt. In the morning pour off the water and put them in boiling water.—Let them stew for 35 minutes, and then put in $\frac{1}{2}$ cupful of sweet cream, with a piece of butter the size of an egg, and a tablespoonful of flour. Stew for 5 minutes longer—send to the table hot, and you have a dish fit for an epicure.

Potato Stew.

The following is far healthier than pork stews :

Four quarts of water ; $\frac{1}{2}$ dozen good sized potatoes pared and sliced ; $\frac{1}{2}$ cup of rice ; handful of finely cut cabbage ; 2 good sized onions sliced ; 2 tablespoons even full of salt ; 1 tablespoon of butter ; a little pepper. When nearly ready to serve up, beat together one egg with a little flour and water and stir in.

Italian Cheese.

The following makes a very nice dish for tea :

Boil a knuckle of veal ; when perfectly cooked, strain the liquor, remove the fat, take out the bones, chop the meat fine ; add 1 grated nutmeg, $\frac{1}{2}$ ounce each of cloves, allspice and pepper. Put the entire mixture on the fire to simmer gently, and when the liquor becomes jelly, pour in a mold, and let it remain until the next day. You may line the mold with hard boiled eggs cut in slices. This is very nice for tea.

Prof. Liebig's Soup.

The following is the celebrated Prof. Liebig's plan for making a soup. He says this will form the best and strongest soup that can be extracted from meat :

Chop lean beef as fine as for mince meat. Mix it uniformly with its own weight of cold water, heat it *slowly* up to the boiling point, and let it boll briskly for one or two minutes. Strain the liquor through coarse linen, add salt and other seasoning.

Soup from Mince Pie Meat.

Many, even good housekeepers are in the habit of throwing away the liquor in which beef has been boiled for making mince pies. It should be generally known that it contains material for good soup.

After the meat is taken out, boil the water if necessary until it is strengthened by evaporation of the superfluous moisture; add vegetables and seasoning, and you have a good dish for the following meal.

Dry Bean Soup.

Many people who cannot afford the more costly luxuries deny themselves those that are cheap simply because they do not know how to avail themselves of them. The following dish costs next to nothing and it makes a meal fit for a king:

Take a quart of nice beans, and put them to boiling by eight o'clock, or nine o'clock at least, then wash a joint of pork, that is, after most of the meat is used off; put it in at half past nine o'clock, and at eleven add some corn dumplings; don't forget to salt them, and to add some red pepper. At half past eleven, add some wheat dumplings. Boil until done.

Mincemeat.

The following is handed us as something a little extra in the way of mince meat:

Take $1\frac{1}{2}$ pounds of currants; a pound of the best raisins, stoned; $\frac{3}{4}$ of a pound of almonds, cut very small; the peel of 1 lemon, minced small; the juice of 1 lemon; 3 apples, minced small; $1\frac{1}{2}$ ounces suet, shred very fine; an eighth of an ounce of nutmeg; the same of cinnamon, the same of mace, and the same of cloves. Put the whole into a jar and keep it dry. When wanted, mix it with either wine or brandy.

Horse Radish Sauce.

There is nothing more excellent with both hot and cold beef than the following horse radish sauce:

2 tablespoonfuls of mustard, the same of vinegar, 3 tablespoonfuls of cream or milk, and 1 of pounded white sugar, beaten well up together with a small quantity of grated horse radish. This is, of course, to be served up cold.

Apple Jonathan.

This is no relation of "brother Johathan," so you may make a meal of it and have no fear of cannibalism :

Fill a baking dish $\frac{3}{8}$ full of sliced tart apples, sweeten to taste; mix wheat meal with water and milk (a little cream will make it more tender) into a batter ; pour over the fruit until the dish is full. Bake until the crust is of a handsome brown color.

Sweet Pickled Tomatoes.

Sweet pickles are generally favorites with most people. The following are nice either with or without spices :

Take smooth, half-ripe tomatoes, scald and peel them, place them in a small necked jar, keeping them whole. Scald vinegar and sugar together the same as in pickling for peaches, pour it over the tomatoes to cover the fruit, of which the jar must be full. Then set it in a boiler of hot water and let it boil till perfectly heated through, and then cover and seal up.

Sweet Pickled Peaches.

These are universal favorites and to know how to make them "real nice," is worth more than the price of this book to any housekeeper. This is the way:

Take any quantity of good ripe peaches, pare them and stone them; cover them in a stone jar with vinegar, and let them remain in it four days; then drain and boil in a little water until they shrink; take them out and drain them again; take half the vinegar which they were soaked in, and to every quart add 3 pounds of sugar; tie up some mace, allspice and cloves in a small bag, and boil to form a middling syrup; pour it boiling hot over the peaches, and set them away to cool.

The Best way to Cook Chickens.

The following is highly recommended, and from our own experience we can vouch for its excellence ;

Cut the chicken up, put it in a pan and cover it over with water; let it stew as usual, and when done make a thickening of cream and flour, adding a piece of butter, and pepper and salt; have made and baked a couple of shortcakes, made as for pie crust, but rolled thin and in small squares. Lay the crust on a dish and pour the chicken gravy over while both are hot.

Fine Pork Sausages.

There are few people to whom a rightly made sausage is not a luxury. It can be made according to the following directions:

Take $\frac{3}{8}$ lean and $\frac{1}{8}$ fat pork; chop very fine. Season with 9 teaspoonfuls of pepper, 9 of salt, 3 of powdered sage to every pound of meat. Warm the meat that you may mix it well with your hands; do up a part in small patties with a little flour mixed with them, and the rest pack in jars. When used, do it up in small cakes, and flour the outside, and fry in butter or alone.—They should be kept where it is cool but not damp. Nice for breakfast.

Welsh Rarebit.

This is said by some to be too rich for health, but if eaten sparingly it will be found delicious and not injurious:

If your cheese is soft, cut it into small slips, or if hard, grate it down; dust thickly with flour; have ready a spirit of wine lamp and a deep tin dish; put in the cheese with a lump of butter and set it over the lamp. Have ready the yolk of an egg whipped, with half a glass of Madeira and as much ale. Stir your cheese when melted until it is thoroughly mixed with the butter, then add gradually the egg and the wine; keep stirring till it forms a smooth mass. Season with cayenne and grated nutmeg, and serve with a thin hot toast.

Cooking Without Milk.

Now and then people are obliged to cook without milk. Nice cakes are made without either eggs or milk as follows:

TEA CAKES.—Stir to a cream $1\frac{1}{2}$ teacupsful of sugar, $\frac{1}{2}$ teacupful butter, half a nutmeg. Then add 1 teacupful of water, 2 teaspoonfuls of cream of tartar, 1 teaspoonful of soda, to 1 quart of flour, which should be put through a sieve. Add flour till stiff enough to roll thin; cut into cakes, bake in buttered pans, in a quick oven.

PUMPKIN AND SQUASH PIES, can be prepared also without milk

by using water and corn starch, say for 3 pies, 2 teacupfuls of pumpkin, 2 eggs, 2 tablespoonfuls of corn starch, allspice and sugar to taste.

CUSTARD PIES,—4 eggs, 4 tablespoonfuls of corn starch, 2 teacups water, sugar and nutmeg to taste. This will make 2 pies. Mix the starch with a small quantity of the water. Custards may be made in the same way. We use Oswego corn starch.

Mince Pies.

There is no better pie than a *good* mince pie, while a poor one is hardly worth the eating. The following is given confidently, as the very best way of making mince pies:

Chop fine 5 pounds of meat and 7 pounds good apples; add 3 pounds raisins, 1 pound currant jelly and 4 ounces butter; mace or cinnamon 1 ounce. When this is prepared, make a crust of $\frac{3}{8}$ the usual quantity of lard, and $\frac{1}{8}$ of fat, salt pork, very finely chopped; all of which should be finely rubbed in flour and wet with cold water. Bake in a slow oven one hour.

Pineapple Pie.

If you want a real luxurious pie, try the following:

Pare and grate large pine apples, and to every teacup of grated pineapple add half a teacup of fine, white sugar; turn the pineapple and sugar into dishes lined with paste; put a strip of the paste around the dish, wet and press together the edges of the paste; cut a slit in the center of the cover through which the vapor may escape. Bake thirty minutes.

Pumpkin Pie.

A chapter on pies with a "pumpkin pie" left out, would be worse than the play of Hamlet with the character of Hamlet left out, so we hasten to give the most approved method of making the regular New England Thanksgiving "pumpkin pie."

Stew a large-sized pumpkin in about 1 pint of water till dry; rub through a colander, add 2 quarts of milk scalded, 6 eggs, a heaped tablespoonful of ginger, half as much cinnamon, 2 coffee-cups of molasses, 2 coffee-cups sugar, 2 teaspoons salt. Bake in a pretty hot oven, one hour at least.

A Delicious Lemon Pie.

The following makes a delicious lemon pie :

The juice and rind of 1 lemon, 1 cup of sugar, the yolks of two eggs, 3 tablespoonfuls of flour, milk to fill the pie-plate; line the plate with paste, pour in this custard, and bake till it is done.—

Beat the whites of 2 eggs, add 4 tablespoonfuls of powdered sugar spread over the pie. and brown lightly in the oven.

Strawberry Pie.

The following is a very palatable pie :

Line your dish with crust made in the usual manner; fill the dish with strawberries of medium size; sprinkle on a little flour, and sugar in proportion to the acidity of the berries. Cover with a thin crust.

Cream Pie.

A delicious pie is made as follows. The quantities mentioned will make three common sized pies:

Mix together 1 egg, 4 cups sugar, a piece of butter the size of an egg, 3 cups flour, 1 teaspoonful cream tartar, $\frac{1}{2}$ teaspoonful soda, 1 cup sweet milk. Pour this on tin plates, and bake light brown. When cold, split open and put in the custard, made as follows: Take 2 eggs, 1 cup sugar, $\frac{1}{2}$ cup of flour, 1 pint milk; flavor with lemon. Beat the eggs, sugar and flour together; boil the milk, and while boiling stir in the mixture, letting it cook a few seconds.

Here is another cream pie worth trying :

Three eggs, a cup of sugar, and a cup of flour, a little salt and nutmeg, or lemon to flavor, (to be baked in 2 large square tins.) For cream inside or between the two cakes, $\frac{1}{2}$ a pint of milk, 1 egg, $\frac{1}{2}$ a cup of sugar, 2 tablespoonfuls of flour—egg, sugar and flour mixed together and stirred in the milk while boiling hot.—Flavor with lemon or vanilla.

Vinegar Pie.

This is good—try it.

Mix 2 cups of vinegar, $1\frac{1}{2}$ of sugar, 2 tablespoonfuls of flour, and a piece of butter the size of a walnut. Prepare a paste to receive these ingredients, and bake the same as any ordinary pie.

Cracker Pie.

The following will make two pies, equal to mince:

Take 3 Boston crackers, split them and pour 1 teacupful of boiling hot water over them, 1 teacupful of raisins chopped, 1 do.

sugar, 2 do. molasses, 1 do. vinegar, 1 teaspoonful cloves, 1 do. cinnamon, 1 do. allspice, 1 do. pepper, and a little salt. Bake between two crusts, and should be eaten while fresh.

Puddings.

Our second chapter on puddings may be introduced with the simple remark that all the following may be relied on as worthy of the attention of any housekeeper. We don't think there is one amongst them that with reasonable care will disappoint you in the serving, though the old saying is that "the proof of the pudding is in chewing the string." In any of these you need not go to that test.

Cottage Pudding No. 2.

Mix $2\frac{1}{2}$ tablespoonfuls of melted butter, 1 cup of white sugar, 1 egg, 1 cup of sweet milk, 1 pint of flour, 1 teaspoonful of soda and 2 of cream of tartar; flavor with lemon. Bake in a moderate oven $\frac{3}{4}$ hour.

Serve with the following sauce:

1 egg, $\frac{3}{4}$ cup of butter, $1\frac{1}{2}$ cups white sugar, $\frac{1}{2}$ glass wine, 2 tablespoonfuls of cream. Set a dish containing it in a vessel of hot water, and stir half an hour.

GOOD CHRISTMAS PUDDING.—The following makes a small, light, rich pudding, which should be served with wine sauce. Any sized pudding may be made, by maintaining the proportions;

Take 3 ounces of flour and the same weight of finely grated bread crumbs, six ounces of nice beef suet (kidney suet) chopped very small, 6 ounces of raisins (weigh the raisins after they are stoned), 6 ounces of well cleaned currants, 4 ounces of minced apples, 5 ounces of sugar, 2 ounces of candied orange-peel, $\frac{1}{4}$ teaspoonful nutmeg mixed with pounded mace, a very little portion of salt, a wineglassful of brandy, and three whole eggs. Mix all these ingredients well together, tie them tightly in a thickly-floured cloth, and boil for four hours.

TELEGRAPH PLUM PUDDING.—This makes a rich, toothsome pudding:

2 pounds of currants, 1 pound of raisins, $2\frac{1}{2}$ ounces flour, $1\frac{1}{4}$ ounces beef suet, $\frac{1}{2}$ pound moist sugar, 4 eggs, 1 ounce of citron and 1 ounce of lemon peel, cinnamon, cloves, mace, and a tumblerful of wine and brandy. To be boiled at least nine hours.

CITRON PUDDING.—One spoonful flour, 2 ounces sugar, 2 ozs. citron peel, a little nutmeg, $\frac{1}{2}$ pint of cream. Mix them together with yolks of 3 eggs, put them in teacups, and bake them in a quick oven.

POOR MAN'S PUDDING.—If the only recommend for this pudding was in its being a poor man's pudding, we don't believe it would have a trial once a year, but it is really a good pudding for anybody.

Half a pint of molasses, half a pint of boiling water, 1 teaspoonful of soda and a little salt. Flour to make as stiff as sponge cake. To convert it into a rich man's pudding, add 1 cup chopped raisins, and one cup chopped suet. Steam two or three hours. Serve with liquid sauce or sugar and cream.

SAUCE FOR ABOVE.—1 cup brown sugar, 1 of water, half a cup of butter, worked together with a teaspoonful of flour; after it boils, stir in half a cup of brandy or other spirits. Vinegar or lemon juice will answer.

ANOTHER PUDDING.—3 teacupfuls flour, 1 teacupful milk, 1 of chopped raisins, 1 of suet, 1 of molasses, 1 teaspoonful saleratus, nutmeg. Put in a bag and boil an hour and a half. Serve with sauce to taste.

THANKSGIVING PUDDING.—1 pound of flour, 1 pound beef suet, 1 of currants, 1 of raisins, 4 eggs, 1 pint of milk, and spicing to taste. Tie in a bag; allow no room for swelling, and boil 4 hours.

CHRISTMAS PUDDING WITHOUT EGGS.—If eggs are scarce, or plenty at 50 cents per dozen, try the following:

1 pound of raisins, stoned, 1 pound of currants, washed and dried, 1 pound beef suet, shred very fine, 1 pound brown sugar, 1 pound flour, sifted, $\frac{1}{2}$ pound candied orange peel, 6 ounces bread crumbs, 1 teaspoonful of mixed spice, $\frac{1}{2}$ pint of milk, 1 teaspoonful salt, the outside rind of 2 large carrots scraped fine; all to be well mixed together, and poured into a mold and covered with thick paper, then with a good cloth and tied tight, plunged into boiling water and kept boiling six hours. To insure a pudding turning out whole, it is a good plan after taking it out of the boiling water to dip it instantly into cold.

GREEN CORN PUDDING.—Take 1 dozen ears of sweet corn, 1 pint cream, 3 eggs, 4 tablespoonfuls flour, 1 tablespoonful sugar, a little butter, and salt to the taste. Grate the corn, and beat the

yolks and all, well together—adding the whites of the eggs (very well beaten) the last thing before putting into the bake-pan, which must be well greased. Bake one hour in a good oven.

Queen Pudding.

The following is one of the richest puddings known to the science of cookery :

Take 1 pint of nice bread crumbs, add 1 quart of milk, 1 cup of sugar, the yolks of 4 eggs, well beaten, the rind of a fresh lemon, grated fine, a piece of butter the size of an egg, then bake until well done. Now beat the whites of the 4 eggs to a stiff froth, adding a teacupful of powdered sugar in which has been previously stirred the juice of a lemon. Spread over the pudding a layer of jelly, any kind to the taste, then pour the whites of the eggs over, and place in the oven until lightly browned. Serve with cold cream.

VICTORIA PUDDING.—The following makes a very rich pudding :

Six ounces of fresh butter worked up to a cream, 4 ounces of loaf sugar mixed in with the butter, 4 yolks of eggs beaten, 6 ounces of bread crumbs, 2 rinds of lemon grated. Line the dish with a light crust, and a layer of jam or marmalade ; then pour in the mixture and bake in a very slow oven for half an hour.—Froth the whites of the eggs, with a little loaf sugar and place them over the pudding, and put in the oven just before serving.

FRUIT PUDDING.—This is one of the best of the plum pudding family :

1½ pounds of raisins, 1½ of currants, 1½ of beef suet, 1 pound of flour, ½ pound of bread crumbs, 4 ounces of citron, 4 ounces of lemon, 4 ounces of orange peel, 2 rinds of lemon, grated, juice of 1 lemon, 4 ounces castor sugar, 10 eggs, 1 teaspoonful each of nutmeg, ginger and cinnamon, 12 bitter almonds, 1 pint of new milk, and a small particle of salt. Mix all together gradually over night, and add a little milk in the morning if required. Boil 7 or 8 hours.

BLACKBERRY PUDDING.—Berry puddings are always acceptable. The following is recommended :

Mix 1 quart of sour buttermilk, 1 teaspoonful of saleratus, a little salt, and flour enough to make it rather stiff. Roll out, cover with blackberries, roll up, put in a buttered basin and steam 1½ hours. Serve with sugar and cream. Tart apples may be used instead of berries.

BAKED INDIAN PUDDING.—Here are two baked Indian Puddings that will be well worth a trial.

Scald $\frac{1}{2}$ pint Indian meal with 1 pint of boiling water or milk, which is better; add 1 large tablespoonful of wheat flour mixed with another pint of cold milk, 1 tablespoonful of ginger, 1 cupful of molasses, 1 tablespoonful of butter, or a small piece of suet chopped fine. Add raisins if liked, when the pudding has been baking about ten minutes. Bake thoroughly.

No. 2.—Mix 3 pints Indian meal, 1 of wheat flour, 2 of sweet milk, 1 of sour milk, 1 cupful of molasses, 1 tablespoonful of salt and 1 teaspoonful of saleratus. Bake 8 hours.

CHICKEN PUDDING.—The following makes a savory pudding:

Beat well 10 eggs, add 1 quart rich milk, $\frac{1}{4}$ pound melted butter, pepper and salt, stir in as much flour as will make a batter. Take 4 young chickens, and cut them up, then put them in a sauce pan with salt and water, thyme and parsley. Boil these until nearly done, then take them out, and put them in the batter and bake, and send up the gravy in a separate dish.

STEAMBOAT PUDDING.—Don't fail to try this because you are not on board a steamboat; it will be found equally good on land:

Take 9 eggs, 1 pound of white sugar, $\frac{3}{4}$ of a pound of butter, 1 teacupful of sweet milk, and 1 teaspoonful of soda, 2 teaspoonfuls of cream tartar, and 1 lemon. Separate the yolks from the whites of the eggs, and beat them separately. Beat the whites to a stiff froth, and add after the rest is put together. Take $\frac{1}{2}$ of a lemon, and put in the paste to eat on it, made of butter and flour, boiling water and sugar. Last of all, put it in a pudding mould, and steam it in a steamer for 3 hours, and be sure to keep your fire up, and not let it stop boiling.

BATTER PUDDING.—The following is easily made and takes but a few moments to prepare it:

Take an iron kettle, butter it well, then pour into it a quart of milk and a little salt; then beat 4 eggs, and mix into the eggs 1 teacup of flour; then let the milk come to a boil of five minutes; then dip it into buttered cups and let it get cold, and eat with sweetened cream.

QUICK PUDDING.—Here is another of those hasty puddings convenient for inconvenient occasions:

Scald a quart of milk; take 3 tablespoonfuls of cold milk, 3 of flour and 3 eggs; rub well together, and pour the batter in while the milk is hot. Then bake half an hour. Butter and sugar beat to a cream for dressing, flavored with nutmeg.

POTATO LEMON PIE.—Here is something a little out of the common run of puddings, but it is none the less desirable on that account:

Take 3 ounces of potatoes, the peel of 2 large lemons, 2 ounces of white sugar, and 2 ounces of butter. Boil the lemon peel until tender, and beat it in a mortar with the sugar, boil the potatoes and peel them; mix all together with a little milk and 2 eggs; bake it slightly.

FARMER'S INDIAN PUDDING.—The following makes a most excellent pudding for six persons:

Take 2 quarts of boiling milk, stir in 2 cupfuls of Indian meal, a handful of flour, 2 teaspoonfuls of salt, $\frac{1}{2}$ cup of molasses, 3 pints sliced sweet apples, and $\frac{1}{4}$ pound of fat pork. Bake three hours. It is good enough for the President. Try it all ye lovers of farmers' fare.

BAKED APPLE PUDDING.—The following makes a very nice, light pudding, good for dyspeptics:

Pare and core sour apples and fill a deep dish with them, adding a little water; then take flour with a little salt, saleratus, and shortening, (proportions as for soda biscuit,) and stir in buttermilk to the consistence of a thick batter, and spread this over the apples and bake. Serve with sauce to the taste.

Baked Tomatoes.

The following is said by those who know, to be a luscious way of preparing this excellent fruit:

Peel the tomatoes in the usual way and bake them in a tin baking pan. When done, season with salt, butter and pepper.

Baked Squash.

It may be new to some people, but it is nevertheless true, that a Hubbard or any other fine-grain, dry-meated squash may be baked, and makes a nice dish cooked in that way.

Cut up the squash into pieces of convenient size and bake as you would sweet potatoes. It is thought by many to be superior to baked sweet potatoes.

Baked Potatoes.

The best way and the healthiest, to cook potatoes, is to roast or bake them in the oven. The potatoes should be washed perfectly clean, and baked and eaten skins and all. The skins when rightly baked are the best part of the potato. When they are sufficiently cooked, the quality is improved by cracking the skins open, and then allowing them to dry out a few minutes before taking them to the table.

To Settle Coffee.

A great many ways are given for making good coffee. The main secret of a good cup of fragrant coffee is to have a good quality of coffee, browned just right, and then made in a clean, sweet coffee pot, and last but by no means least, have your coffee well settled, so that it will pour out like liquid amber.

A common method of clearing coffee is by the addition of an egg. The white is the only valuable part for the purpose, and only a small portion of one is needed for an ordinary family. It should be mixed with the ground coffee before the water is added. Clean egg shells will do very well. When eggs are 50 cents a dozen, they are not always at hand; a bit of codfish, or even a pinch of salt, is a very good substitute; and if the coffee is put to soaking in a little cold water over night, it will settle clear without the addition of anything.

How to Cook Spinach.

This is the earliest and to many most welcome spring vegetable, but is very apt to be spoiled in the cooking. It is important to know that it does not require any water, the expressed juice being sufficient to keep moist and free from burning. Cook as follows:

Boil 15 minutes after a very careful washing and picking, in a covered sauce-pan without water, and with a little salt; drain thoroughly, and pour over egg sauce; garnish with hard boiled eggs cut in rings.

German Tea Cake.

The following will be found a nice cake for tea :

The ingredients are flour 1 pound, butter $\frac{1}{4}$ pound, yeast 2 spoonfuls, 3 eggs, salt, sugar and warm milk. Take some flour, pour the yeast and some of the milk upon it; lay the butter, cut in pieces, on the flour, and put this mixture in a warm place until it rises. Then add the 3 eggs, salt sugar and warm milk, and mix them all well together until the paste does not stick to the spoon. Roll the paste out into a long piece, which cut into five or six strips. Roll the strips separately to make them round, and sprinkle them with flour; plait them together and form them into a wreath. Let it stand again for some time in a warm place until it has risen sufficiently. Strew finely chopped almonds over it. Brush it over with yolk of egg, and bake it in a very warm oven.

Mountain Cake.

One who judges from experience after frequent opportunities of testing its qualities, declares this the best cake ever made in America.

1 pound of flour, 1 pound of sugar, $\frac{1}{2}$ pound of butter, 6 eggs, 1 cup of sweet milk, 1 teaspoonful of cream tartar, $\frac{1}{2}$ teaspoonful of soda. Flavor with vanilla. Bake in four pans, and while a little warm, put the several cakes together as you would jelly cake, but with frosting.

Corn Starch Cake.

If you would try your hand at something nice, take this :

Mix 1 egg, 2 cups of flour, 1 cup of milk, 1 cup of sugar, 1 teaspoonful of soda, 2 of cream tartar, a piece of butter half the size of a hen's egg, melted ; bake the same as for jelly cake, in shallow tins, and when cold, pile in layers, with a custard between made as follows : Take 1 egg, 1 cup of milk, sugar to taste, 2 teaspoonfuls of vanilla extract, 2 teaspoonfuls of corn starch. Boil the milk, heat the egg and corn starch together, and stir into the boiling milk which must be previously sweetened ; when cold, stir in the vanilla ; the custard must cool before being put with the cake.

DESSERT CAKE.—This is simple, inexpensive, and easily and quickly prepared.

Mix 4 eggs, 2 quarts sweet milk, 1 teaspoonful salt, $\frac{1}{2}$ teaspoonful soda, and 3 teacupfuls flour. Spread it thin in tins and bake fifteen or twenty minutes. To be eaten with butter and sugar.

SCALDED GINGER CAKE.—This cake is highly recommended by an experienced housekeeper :

Put 1 pint of molasses and 2 spoonfuls butter in a pan, heat to boiling, then pour it on to 1 quart of flour. Stir it well and when cool add 2 eggs well beaten, 1 tablespoonful of soda, dissolved in 2 large spoonfuls of brandy, and 1 of ginger. Add enough flour to make it thick enough to roll; work it out thin and bake in square tins.

TEA CAKES.—Mix 2 cups cream, 3 cups sugar, 5 eggs, the whites beaten to a stiff froth, 1 teaspoonful of soda, flour to make about as stiff as pound cake. Salt and spice to the taste.

POUND CAKE.—The following is highly recommended to us by one who knows whereof she speaks by actual trial :

Stir 1 pound of butter and 1 pound of granulated white sugar until they form a cream. Beat the whites of 1 pound of eggs (9 large or 10 of common size) until they will remain upon an inverted plate; stir these with the butter and sugar, then add the yolks also previously well beaten. Mix with this 1 pound of flour, 1 small teaspoonful of saleratus, and flavor with lemon.—After stirring the whole well together, pour it into two basins well buttered, and with white paper in the bottom. Two-quart basins with perpendicular sides are best.

FRUIT CAKE.—Here is an excellent cake :

Stir 1 pound brown sugar and 1 pound butter until they form a cream. Beat the whites of 10 eggs until they will remain upon an inverted plate; stir these with the butter and sugar, then the yolks also well beaten. Mix with this 1 pound flour, 1 small teaspoonful of saleratus, and flavor with lemon. Stir the whole well together, and then add 1 pound figs sliced, 1 pound currants, $\frac{1}{2}$ pound citron, and $2\frac{1}{2}$ pounds of the best kind of raisins. The currants need washing thoroughly, and the seeds should be removed from the raisins. Flavor with nutmeg, cloves, cinnamon and lemons, as desired.

FROSTING.—For a half pound loaf. The whites of 3 eggs, beaten until they will remain upon an inverted plate; to which add pulverized white sugar, a little at a time, until of the desired consistence. After spreading it on the cake, set in a warm oven to dry; when thoroughly dried, spread on another layer and dry as before, until of the desired thickness.

SPONGE CAKE.—The following process of making sponge cake is imparted by one long noted for the excellence of her pastry :

Beat 6 eggs, yolks and whites together, 2 minutes. Add 3 cups white sugar and beat 5 minutes; 2 cups flour with 2 teaspoonfuls cream tartar, beat 2 minutes; 1 cup cold water with 1 teaspoonful soda dissolved in it and beat 1 minute; the grated rind and juice of a lemon; a little salt and 2 more cups of flour, and beat one minute. Bake in rather deep cup pans. This will make three quite large sheets, and it does not dry quickly as most sponge cakes do.

ANOTHER SPONGE CAKE.—Equal weights of eggs and sugar (pulverized,) half weight of flour; beat the yolks and whites separately (very light;) mix the sugar and yolks first, then add one grated lemon and beat for fifteen minutes, then add the whites and mix well; lastly stir in the flour and mix gently.

MOCK SPONGE CAKE.—2 cups flour; 1 of sugar, 1 of milk, 1 egg, 1 teaspoonful saleratus, 2 teaspoonfuls cream of tartar.

MOLASSES SPONGE CAKE.—Mix 1 cup of molasses, $1\frac{1}{2}$ of flour, 3 eggs, and a teaspoonful of soda. Bake in a quick oven.

SILVER CAKE.—This is one of the unfailing resorts of almost every good housekeeper, and together with gold cake forms the staple on many occasions.

Stir to a cream 1 cup of butter with 2 of white sugar; add the whites of six eggs beaten stiff; 1 cup of sweet milk, with half a teaspoonful of soda dissolved in it. Stir 1 teaspoonful cream of tartar into four cups of flour and add to the cake. Flavor with lemon, vanilla, or rose water.

GOLD CAKE.—Use the above, but use the yolks in place of the whites of the six eggs.

SNOW-BALL CAKES.—This is highly recommended.

1 cup of white sugar, $\frac{1}{2}$ cup of butter, the whites of 5 eggs, 1 teaspoonful of soda, and a little nutmeg; add flour enough to make a stiff batter; bake in patty tins.

ALMOND CHEESECAKE.—If you want something a little extra, try the following:

2 ounces of sweet and 1 ounce of bitter almonds pounded with lump sugar to prevent them boiling, 2 ounces of butter, melted very thick; the yolks of 3 eggs, well beaten; half a noggin of brandy, and a little nutmeg. The whites of the eggs are to be beaten to a very light froth, and allowed to stand for a quarter of an hour to drain, and the light part put in the last thing. The butter must be nearly cold when added.

ECONOMY CAKES.—These can be recommended as very good:

Take 1 quart of mashed potatoes, 1 egg, $\frac{1}{2}$ teacup wheat flour, a tablespoonful of butter, and add milk to form a thick batter.—Season with pepper and salt. Mix all well together; make into cakes $\frac{3}{4}$ inch thick, and fry brown where meat was previously fried.

CREAM OF TARTAR CAKE.—Try this occasionally for a change:

Take 3 cups of sugar, 3 eggs, $\frac{1}{2}$ cup of butter, 1 cup new milk, $\frac{1}{2}$ teaspoonful of soda, 1 teaspoonful of cream of tartar, and 4 cups of flour. Mix the cream of tartar with the flour, and the soda with the milk, and add a little salt. Season to the taste. Bake in shallow tins, and cut in squares.

RICE CAKE.—4 ounces of ground rice, 3 ounces of flour well sifted, and 3 ounces of loaf sugar also to be well sifted, 6 eggs with half the whites: the whole to be beaten together for twenty minutes, and baked three-quarters of an hour.

PUFF CAKE.—Take 2 cups of white sugar, 3 eggs, 1 scant cup of butter, 1 cup of sweet milk, 1 teaspoonful of saleratus, 2 of cream of tartar, 3 cups of flour. Flavor to taste. Stir together at once.

HARD MOLASSES GINGERBREAD.—Take $2\frac{1}{2}$ cups molasses, $\frac{3}{4}$ cup of shortening, butter is preferable, fill the cup with boiling water, stir until the butter is dissolved, a tablespoonful ginger, a teaspoonful soda, stir quickly; knead with flour enough to make it hard, roll thin, bake in a quick oven twenty minutes.

A CHEAP, SOFT GINGERBREAD.—1 pound of flour, 1 cup of molasses, half a cup of sour milk, 2 teaspoonfuls of ginger, 1 cup of butter, and 1 teaspoonful of saleratus; bake by a slow fire for an hour.

ANOTHER GINGERBREAD.—Take 1 quart molasses, 1 pint lard, 2 pints very sour cream, 5 heaped tablespoonfuls soda, 2 of ginger, 1 nutmeg, mix into a dough as soft as can be rolled; roll thin and bake.

SOFT SORGHUM CAKE.—The following is spoken highly of by those on whose judgment we rely:

Take 3 eggs, 1 pint of sorghum molasses, 1 of sour cream, half nutmeg, 1 teaspoonful of soda. Beat the eggs and molasses together until light, thicken with flour to the consistence of batter cake; this will be enough to fill two common sized stove pans.

Frosting for Cake.

The following makes a capital frosting for all kinds of cake:

Take 1 pound white sugar and just water enough to dissolve it; the whites of 3 eggs beaten a little, but not to a froth; add them to the sugar and water. Put the mixture into a deep dish, and place the dish in a kettle of boiling water, and beat till quite thick. Take from the fire and beat till cold and thick enough to spread with a knife.

ANOTHER FROSTING.—Here is another frosting that is highly recommended :

Beat the whites of 4 eggs to a stiff froth, then add 1 pound white sugar, $\frac{1}{4}$ ounce gum arabic and 1 teaspoonful of starch, all pulverized and sifted, and lemon juice to flavor, and then stir the whole thoroughly. Lay on one coat of frosting with a knife after the cake is cold, and let it stand over night, and then lay on another coat, wetting your knife occasionally in cold water, the better to smooth and polish the last coat.

Cookies.

These are indispensable in all well-regulated families on the breakfast table or on the tea table.

Take equal proportions of butter, cream and molasses, a tablespoonful each of ginger and spice, also a teaspoonful of soda.—Bake in a moderately hot oven, and your cakes will be light and soft.

MOLASSES COOKIES.—2 cups of molasses, 2 eggs, 1 cup of cream, 1 teaspoonful of soda or saleratus ; season with nutmeg.

GINGER COOKIES.—2 cups of molasses, 1 of butter, 7 tablespoonfuls of water, 2 teaspoons cream of tartar, 1 of ginger. Mix soft, roll and bake quick.

TELEGRAPH COOKIES.—The following are the best cookies ever made, and we say it understandingly. For the past six years we have had them constantly on our table, and in all that time no stranger ever tasted them without speaking of them in words of highest commendation :

Take 2 eggs, 2 cups of sugar, 1 cup of butter, $\frac{1}{2}$ teaspoonful of soda, and flour—mix soft, roll thin and bake in a quick oven.

TEA CRACKERS.—The following will be found first rate, and once tried they will not be neglected :

3 teacupfuls flour, 1 of lard, 1 of water, a large teaspoonful of salt. Mix all together, put it on the pie-board and work it well, adding flour until stiff, short, and perfectly smooth. Roll out as thin as a knife blade, prick with a fork, and bake well, but do not brown.

DOUGHNUTS.—Many families keep doughnuts always on hand, for lunch, etc. The following will make doughnuts good enough for anybody:

Take a teacupful of good hop yeast, 1 of molasses, 1 of meat fryings, 2 of flour, and use salt to suit the taste. Mix in the evening and keep warm over night, and fry in the morning.

ANOTHER DOUGHNUT.—Try this; Some think it better.

To 1 quart of milk add $\frac{1}{2}$ pound butter, $1\frac{1}{4}$ pounds sugar, 1 teaspoonful of soda, and 2 of cream of tartar dissolved separately in as little water as possible. Mix with sufficient flour, and boil immediately.

Union Cake.

Of course all friends of the Union, especially young men and maidens, will go in for this cake:

Take 2 cups of flour, 2 cups of sugar, $1\frac{1}{2}$ cups of sour cream, 2 eggs, 1 teaspoonful of saleratus, $\frac{1}{2}$ teaspoonful of nutmeg. When all are united, stir them up.

JELLY CAKE.—The following is vouched for by one who knows:

Take 1 cup of sugar, 4 eggs 1 cup of flour, $\frac{1}{2}$ teaspoonful of soda, dissolved in a tablespoonful of sweet milk, and 1 teaspoonful cream of tartar mixed in flour. Bake in one long tin, then spread with jelly, roll up and cut in slices.

HUCKLEBERRY GRIDDLE CAKES.—Stir in 1 even teaspoonful of soda to 2 quarts of sweet milk, 1 teaspoonful of salt, 1 pint of ripe huckleberries to make a thick batter; bake on a griddle as other cakes.

POTATOE GRIDDLE CAKES.—1 quart of milk, 6 cold boiled potatoes grated, 2 eggs, and flour enough to make a batter.

CRISP GINGER CAKES.—These will be found first rate.

Take 2 pounds of flour, 1 pound of sugar, 3 tablespoonfuls of ginger, wet with molasses, roll thin, cut in small cakes, and bake them quick.

GINGER SNAPS.—The following is an approved way of making these indispensables :

To $\frac{1}{2}$ cup butter and 1 pint molasses boiled together and then allowed to cool, add 2 tablespoonfuls of ginger, 1 teaspoonful of soda, and flour to roll. Bake quick in thin rounds, or a flat sheet.

BUNNS.—The following is the manner of making these historical “aids to appetite:”

Take $\frac{1}{2}$ pint of milk, $\frac{1}{2}$ cup of yeast, 1 cup of butter, 1 cup of sugar, make it stiff with flour; add nutmeg if you like. Bake in a quick oven.

M. Soyer's Custard.

The following is the recipe given by the celebrated French cook, M. Soyer, for making custard, a sufficient guarantee of its excellence:

With 1 pint of boiling milk, mix 2 ounces white sugar, to which add the thin yellow peel of half a lemon.—Beat 4 eggs thoroughly in a basin, and gradually add the prepared milk (not too hot). Pass the mixture through a colander—fill custard cups, place them over the fire in a stew pan, with about 1 inch of water in it, and boil 10 to 12 minutes.

To make Curry Powders, or Curry Paste.

This is an article much used in cooking by professional cooks, for flavoring various dishes:

Take turmeric 6 ounces, coriander seed 8 ounces, black pepper 4 ounces, fenugreek 2 ounces, ginger 2 ounces, cayenne pepper $\frac{1}{2}$ ounce, cummin seed $\frac{1}{2}$ ounce, all thoroughly pulverized and mixed.

ANOTHER.—Turmeric 5 ounces, coriander seed 3 ounces, black pepper 1 ounce, ginger 1 ounce, cayenne pepper 1 ounce, scorched mustard 2 ounces, mace 2 drams; all pulverized and thoroughly mixed.

Plum Catsup.

The following recipe will answer for gooseberry catsup equally well, These catsups are great favor-

ites with those who are in the habit of using condiments constantly, as an agreeable change:

Boil together for two hours, 9 pounds plums, 6 pounds sugar, and 3 pints vinegar. Just before removing from the fire, add 1 tablespoonful each of allspice, cloves and cinnamon. Keep in small jars well corked.

Tomato Catsup.

This is the best and most substantial condiment of the kind—"the real stand by"—most of the other kinds are mere novelties that you soon tire of.

Pick fair, ripe tomatoes, perfectly sound. Boil until they come to pieces, and strain the pulp through a wire seive. Boil again, and add pepper, allspice, cloves and cinnamon, to suit the taste. No definite rules can be given for this, as tastes vary, and that is all there is to consult. Put in jars or bottles, and keep well sealed or corked.

Asparagus Loaves.

If you want to give some special friend a rare treat from your asparagus bed, try the following:

Boil 3 bunches of asparagus, cut off the tops of two bunches, when tender, leaving two inches of the white stalk on the rest, and keeping it warm; stew the tops in a pint of new milk, with 3 tablespoonfuls of butter, rubbed in flour, the yolks of 3 eggs, nutmeg and mace; when it boils put the mixture into a loaf or rolls, with the crumbs scooped out; put on the tops of the rolls, make holes in the top and stick in the remaining asparagus.

To Cook a Ham.

The following is an excellent way to cook a ham. Cooked in this way and nicely sliced, when cold, a ham is a great luxury:

Boil 3 or 4 hours according to size; then skin the whole and fit it for the table. Then set in the oven for half an hour, cover it thickly with pounded rusk or bread crumbs, and set it back for half an hour longer. Boiled ham is always improved by setting it in an oven for nearly an hour, until much of the fat dries out, and it also makes it more tender.

To Boil Fish.

Try the following if you would get all the virtues of a nice trout or white fish:

Fill the fish with a stuffing of chopped salt pork and bread, or bread and butter, seasoned with salt and pepper, and sew it up. Then sew it into a cloth that you may take it up without breaking. Put it in enough cold water to cover it, salted at the rate of a teaspoonful of salt to each pound of fish; and add about 3 tablespoonfuls of vinegar. Boil it slowly for 20 or 30 minutes, or till the fin is easily drawn out. Serve with drawn butter and eggs, with capers or nasturtion in it.

Drawn Butter.

This enters quite largely into the preparation of many dishes, and a recipe for making it will be in place here :

Rub 2 teaspoonfuls of flour into $\frac{1}{4}$ pound of butter, and add 5 tablespoonfuls of cold water. Put into a gravy dish and set in boiling water; let it melt and heat till it begins to simmer, and then it is done. If for fish put in chopped boiled eggs and capers. If for boiled fowl, put in oysters before it is melted and let them cook through while the gravy itself is cooking.

Pickled Eggs.

This is a great favorite with many, as a relishing accompaniment to cold meat, and when eggs are plentiful, it is by no means expensive :

Boil the eggs till quite hard; then after carefully removing the shells, lay them in wide mouthed jars, and pour over them scalding vinegar, well seasoned with whole pepper, allspice, a few races of ginger, and a few cloves. When cold, close the jars tightly, and in a month they are fit for use.

Russian Bear.

This is a name that has been adopted for a new style of pickle, and is consequently not half so bad as it sounds. This pickle is made of ripe cucumbers, and is very popular with those who have tried it. The following is the process :

Take large ripe cucumbers before they are soft. Cut in rings, pare and remove the seeds, and then cut in smaller pieces if thought best. Cook the pieces very slightly in water just salt enough to flavor well. Drain and put in a stone jar. Prepare a vinegar as follows : 2 quarts vinegar, a few slices of onion, some Cayenne pepper, whole allspice, whole cloves, whole cinnamon,

according to taste. Much cooking spoils the pickle. When taken from the fire the pieces should not be soft enough to admit a silver fork readily.

Southern Mode of Cooking Rice.

"Down south," where rice forms a much larger proportion of the common food than here, it is but natural to suppose that they would know better how to cook it than we do. Their method is as follows:

Pick over the rice and wash it in cold water; to 1 pint of rice put 3 quarts boiling water and $\frac{1}{2}$ teaspoon of salt. Boil it briskly $\frac{1}{4}$ hour, then turn off all the water and set it over a moderate fire, uncovered, another $\frac{1}{4}$ hour to steam, and it is ready for the table. The rice water first poured off is good to stiffen muslins.

To Roast a Goose.

Most people have an idea that a roast goose is far inferior to a roast turkey, but that is more on account of not knowing the best method of cooking the goose, than any inherent inferiority of the goose. Try this method of roasting the goose and see if it is not as good as a turkey:

Chop fine 2 ounces of onion and 1 ounce of green sage, and add a coffee-cupful of bread crumbs, a little pepper and salt, and the yolks of 2 eggs. Don't fill the goose quite full, but leave a little room to swell. Roast from 1 to $1\frac{1}{2}$ hours, and serve with gravy and apple sauce.

To Prepare Tripe for the Table.

On page 261 we gave the process of cleaning tripe and getting into the pickle. The following is a method of preparing it for the table:

Take a kettle of hot water, nearly boiling, put in a piece of soda the size of a walnut, cut your tripe in small pieces, put one piece in at a time, and let it remain about 5 minutes, or longer, until it will scrape off easy; clean, soak in salt and water 2 days, and scrape each morning. It will be ready for cooking. Boil till well done.

Prof. Liebig's Food for Infants.

It frequently becomes necessary to provide artificial food for infants, and few know how to prepare it. Many a smart and promising infant has been brought to an untimely grave through want of this information. The celebrated chemist, Prof. Liebig, was induced by the suffering of an infant grandchild to look into this matter. He found that even the best cow's milk was slightly acid, while the mother's milk is alkali, and the cow's milk contains different proportions of constituents. He found also that most artificial food, however carefully prepared, is still more acid, and that the flour is never chemically dissolved, and that full twenty per cent. of it never is digested, and the whole taxes the digestive system too severely. As the result of his investigations, Prof. Liebig published the following prescription for what he terms rational food for infants. It is sweet, pleasant, and requires much less of it than of pure milk to satisfy them, while it nourishes them far better. It requires no more sweetening, and should have none ordinarily :

In a small sauce pan carefully mix, so as to avoid the formation of lumps, wheat flour, $\frac{1}{2}$ ounce; milk, 5 ounces; bring this mixture to a boil slowly, and keep it boiling for 3 or 4 minutes, and then remove it from the fire. During the time it is boiling, mix in another vessel malt, $\frac{1}{2}$ ounce; water, 2 ounces; and 30 drops of a solution containing 11 per cent. of the carbonate of potassa. Then add this mixture to the hot contents of the saucepan, put on the lid and let it remain for half an hour undisturbed in a warm place, where the temperature does not exceed 148 degrees. After the lapse of this time, put the sauce pan on the fire again till its contents begin to boil, and then pass the liquid

through a fine strainer. The exhausted bran will be retained upon the sieve.

Balm of a Thousand Flowers.

This is an article that has made snug fortunes for one or two manufacturers, but as a money making institution it has run its day. Still for all practical purposes it just as good now as it ever was, and as the "thousand flowers" of which it is composed are perennial, you may make the article for yourself at small cost. The recipe is sold at 25 cts. to \$1.—Here it is as we received it from New York.

Dissolve 4 ounces best white bar soap in 1 pint deodorized alcohol; then add 1 drachm oil of citronella, $\frac{1}{2}$ drachm oil of rosemary and $\frac{1}{2}$ drachm oil of neroli.

It used to be sold as a grand specific to remove tan and freckles, and to impart a rosy freshness to the complexion; also as an excellent tooth-wash.—It is most valuable for this latter purpose. Pour a little into warm water, and use for a washing lotion, or a tooth-wash.

Magic Painkiller.

This has been sold under various names—"magical cure-all," "wonder of the age," &c. It is good for rheumatism, gout, pain in the side, head, back, or joints, sore or inflamed eyes, cramps, convulsions, cholic, etc.: asthma, phthisic, liver complaint, consumption, croup, etc.

Take best alcohol, 4 ounces, sulphuric ether, 12 ounces, laudanum, 1 ounce, and oil of lavender, 2 ounces. Shake all together in a bottle and keep corked tight.

DIRECTIONS FOR USE.—In all cases where there are no raw sores,

apply repeatedly to the parts affected, rubbing in well with the hand. For sore eyes and inflamed sores that are raw, or discharge, apply the remedy around the parts, but not on the raw sore. For cramps, convulsions, colic, &c., applying externally, take 1 to 2 teaspoonfuls internally according to the age or strength of the patient, mixed always with a little warm water or herb tea. For croup, administer $\frac{1}{2}$ to 1 teaspoonful according to the age, with double the quantity of goose oil.

Felonifuge.

The following is a never-failing remedy for felons. We have given remedies on pages 73 and 225, but this is so simple, and as we have the assurance of an experienced physician that it was never known to fail, we give it here :

As soon as the first stinging pain is experienced in the finger, wrap it up completely in a Spanish fly blister, and allow it to remain until a cure is effected.

To Remove Warts.

We gave a "wart and corn salve" on page 44, but this for warts is less trouble to apply :

Take a small quantity of chloride of zinc and common flour, sufficient to make a paste, mixing with rain water. Apply it to the wart one night, and afterwards apply a bread and milk poultice, until the whole excrescence may be easily removed without pain or soreness.

Instant Relief for Burns or Scalds.

The following simple remedy has a magical effect upon burns or scalds, giving almost instant relief.

Apply to the burnt or scalded surface raw cotton, or cotton or linen cloth saturated in a strong tincture or essence of peppermint, and keep wet for a short time.

Cheap Paint.

The following is a cheap and valuable method of using paints and dispensing wholly or in part with oils, and making a paint more durable than has ever

been produced by the ordinary modes of preparing paints:

Add to 1 gallon of soft water, when boiling, 1 ounce of saleratus, 2 ounces potash, and 1 pound gum shellac. Boil gently without stirring until the ingredients are well dissolved and mixed. The compound will then be ready to add to all kinds of paints, ground in oil, or in a dry state, and when properly mixed and applied to wood, iron, cloth, or other material will produce a beautiful and durable coat which will dry in two-thirds the time required for oil paints, and reduce the expense in oil fully one-half.

Cold Cream.

We gave one formula for making this "aid to the complexion," on page 232. Here is another direct from the boudoir of a fair Parisienne:

Take olive oil 4 parts, White wax 1 part. Heat together till a uniform liquid mass is obtained; perfume with rose, orange, lemon, vanilla, or anything to your taste, and then stir constantly until it is cold.

Eau de Cologne.

The following is the recipe used by the manufactories in Cologne for making the celebrated Eau de Cologne:

Mix 12 drops each of the essential oils of neroli, citron, bergamot, orange and rosemary, with 1 drachm malabar cardamoms, and 1 gallon rectified spirits, the whole distilled together.

Pleasant Evening Drink.

A delicious evening drink is prepared as follows:

Mix with a quart of spring water the juice of 6 oranges and that of 2 lemons, and sweeten with *capillaire* or syrup.

Size of Nails.

The following table will show any one at a glance the length of the various sizes and the number of nails in a pound. They are rated at "three-penny" up to "twenty-penny."

Length.	No. per pound.	Length.	No. per pound.
3-p'y...1 inch	557	12-p'y...3 inches	54
4 " ...1 $\frac{1}{4}$	353	20 " ...3 $\frac{1}{2}$	34
5 " ...1 $\frac{3}{4}$	232	Spikes...4	16
6 " ...2	167	" ...4 $\frac{1}{2}$	12
7 " ...2 $\frac{1}{4}$	141	" ...5	10
8 " ...2 $\frac{1}{2}$	101	" ...6	7
10 " ...2 $\frac{3}{4}$	98	" ...7	5

From this table an estimate of quantity and suitable sizes for any job can be easily made.

Vegetable Materia Medica.

There is no subject to which many wish to refer oftener than to that of the qualities and properties of the various species of vegetables that come frequently under their observation. To meet that want we give a list here of the principal vegetables that enter into the medical preparations of the day.

ALDER.—This is an astringent, useful in bleeding at the lungs, or as a wash for ulcers.

ARBOR VITAE.—The oil extracted from the young leafy twigs, is recommended as a vermifuge.

ANGELICA.—Aromatic, stimulant and tonic. Good in nervous ailments, indigestion, flatulence, etc.

ARNICA.—Used as a stimulant in paralytic affections, typhoid fevers, bruises, sprains, stiffness of joints, rheumatism, etc. It is procured at the druggists mostly in the form of tincture, plasters, etc.

ASH, PRICKLY.—The bark and berries of the prickly ash are stimulant and tonic. They are almost a certain remedy for cold feet or hands, and all diseases dependent on a sluggish or languid circulation. Dose—from $\frac{1}{2}$ to 1 teaspoonful of the powdered bark and berries.

BALM OF GILEAD BUDS.—Steeped in spirits, excellent for bathing wounds.

BALMONY.—Serves as a tonic laxative and may be used in debility, costiveness, dyspepsia, jaundice, coughs and colds. There are but few forms of disease in which this article may not be used to advantage. Dose—an even teaspoonful of the powdered herb.

BALSAM FIR.—This a valuable expectorant and tonic, beneficial in coughs, colds, and all affections of the lungs.

BARBERRY.—The bark is a tonic and laxative, useful in jaun-

dice, loss of appetite, weakness of the digestive organs, and in all cases where golden seal is recommended. Dose—a teaspoonful of the powdered bark.

BAYBERRY.—The bark of bayberry is powerfully astringent and stimulating; useful for cleansing the stomach and bowels from canker, scarlatina, dysentery and diarrhœa. A decoction of the bark is also useful as a gargle for sore throat, and as a wash for ill-conditioned sores.

BETH ROOT.—This is astringent, tonic and antiseptic; may be employed in all cases of hemorrhage, leucorrhœa, asthma and coughs. Dose—half a teaspoonful.

BLACKBERRY.—This is an astringent; very valuable for diarrhœa—a decoction made from the small roots and bark of the larger roots.

BLUE FLAG.—Useful in fevers, or to expel humors from the system. Dose—half a teaspoonful three times a day.

BONESET.—This is a well-known herb, and in localities where fever and ague prevail it is much used as an antidote for that. It is a laxative, tonic, and expectorant. A decoction of the leaves and flowers, taken while warm and in large quantities, will evacuate the stomach in a very safe and gentle manner; administered cold, it acts as a tonic and laxative. It is useful in colds, coughs, and pulmonary complaints.

BURDOCK.—This is frequently a great nuisance to the farmer, and it ought to be valuable as a medicine to make up for the trouble its burrs occasion. The root is especially esteemed as an ingredient in some kinds of root beer. It is a mild cathartic, producing perspiration. The leaves are good in fevers to bind on the head and feet.

CAYENNE.—This is a well known kitchen vegetable, more commonly known as “red pepper.” It is a pure, powerful and healthy stimulant, and produces, when taken into the stomach, a sensation of warmth which diffuses gradually through the system, but without any narcotic effect. It is an excellent remedy for colds, coughs, flatulency, dyspepsia, etc. It should not be taken in large doses upon a cold or empty stomach, but in small quantities at first, gradually increasing the dose.

CLEMATIS.—(Virgin’s Bower.)—Has active caustic properties.—Leaves are acrid and vesicant. The leaves are rubefaciant in rheumatism.

CONVOLVUS.—(Morning Glory.)—A well known plant with an acrid, milky juice. Used as a purgative. Jalap and scammony are made from plants of this genus.

CATNIP.—In fevers promotes perspiration without raising the heat of the body. It is also valuable for injections.

CHAMOMILE.—This is a stimulant and tonic, useful in colds, febrile attacks and debility. A tea made of the dried flowers is soothing to the nerves, and is much used for infants.

CHERRY, WILD BLACK.—This has many virtues attributed to it,

especially the bark, and on the strength of those is founded the popularity of Ayer's Cherry Pectoral.

CANCER ROOT.—(Beech Drops.)—A leafless plant that grows in beech woods, erroneously supposed to be a parasite growing on the exposed roots of beech trees. The whole plant is powerfully astringent; and the root is brownish, spongy, and very bitter and nauseous in taste. All parts of the plant are used. It was formerly supposed to be an antidote for cancers, hence its name. The plant was used in conjunction with white oxide of arsenic, and formed the once celebrated medicine, Martin's Cancer Powder.

CLEAVERS (Bed-straw).—A powerful diuretic, useful in inflammation of the kidneys and urinary obstruction.

COMFREY.—Has peculiar mucilaginous properties, and is valuable in all consumptive complaints.

COLTSFOOT.—(Wild ginger—Ginger Root.)—Stimulating tonic. A tea made of the root is good for hoarseness.

DANDELION.—Tonic and diuretic, an excellent corrector of the bile, and an invaluable remedy in hepatic diseases.

DOGWOOD (Cornus Florida).—The bark is successfully used in intermittent fevers, and is a valuable tonic. One of the most important medicinal products of North America.

ELECAMPANE.—The root has a faint, aromatic odor, and a bitter, acrid taste. It acts as a gentle stimulant to the organs of secretion, promotes expectoration, and is diuretic and sudorific.

EVAN ROOT.—(Cranesbill geranium.)—This is a valuable tonic and astringent, useful for diarrhea, dysentery, sore mouth, debility, &c.

GINSENG.—This is one of the most valuable of all the herbs, and is an important article of commerce. The root is tonic and nerve. It is useful in all cases of debility, loss of appetite, neuralgic affections, and dyspepsia. Dose—half a teaspoonful of the root, powdered, more or less.

GOLD THREAD.—This is astringent and tonic, useful as a gargle for sore throat, and is much used for that purpose, and for infant's sore mouth. It may also be employed in debility, and loss of appetite, and in all cases where golden seal and poplar bark are recommended.

GOLDEN SEAL.—Is a laxative and tonic, and an excellent remedy in costiveness, loss of appetite, jaundice, debility, liver complaint, and faintness at the stomach. Taken in doses of an even teaspoonful, it is efficacious in relieving unpleasant sensations occasioned by a too hearty meal.

GOLDEN ROD.—Is aromatic, and slightly stimulant; is used for quieting pains in the stomach and bowels, flatulency, and for scenting other medicines. It is used more for dyeing than for medical purposes.

GUM MYRRH.—Astringent, antiseptic and tonic. It is useful in pulmonary complaints, loss of appetite, sore mouth and offens-

ive breath. It is also useful in dysentery and diarrhoea, and to cleanse offensive ulcers, putrid and ill-conditioned sores. Dose a teaspoonful of the tincture or $\frac{1}{4}$ teaspoonful of the powder.

HEMLOCK.—The bark of the hemlock tree is astringent and tonic. Enemas composed of a strong decoction of this article may be used with advantage in all cases of prolapsus. A tea made of the boughs and leaves is excellent in case of coughs and colds.

HOARHOUND.—The root is stimulant and tonic; useful in colds, coughs, asthmatic affections, and in pulmonary diseases. It may be prepared with honey or molasses.

INDIAN TURNIP.—(Arum.)—This is a well known herb growing in the woods everywhere. The root has a pungent, burning, acrid taste, as many an incautious youth can testify. This property is lost in drying. In a fresh state it is a drastic purgative, too violent for medicinal use. Arrow root and sago are produced from this root. In medicine it is used as a stimulant in impaired digestion, a diuretic in dropsies, and an expectorant in chest complaints.

LADIES' SLIPPER.—This is a valuable nervine, quiets nervous excitement, eases pain, and induces sleep. It may be used freely in all nervous and hysterical affections, without incurring the least danger, or producing unpleasant consequences. Dose—a teaspoonful of the powdered root may be taken three or four times a day, or until relief is obtained.

LILY, WHITE POND.—The root is a powerful astringent, useful in bowel complaints, and as a gargle for putrid and ulcerated sore throat. It is used as a poultice for boils and other painful swellings, and combined with slippery elm, it forms an excellent poultice for cleansing old sores, ulcers, &c.

LOBELIA.—(Inflata.)—This is a very marked flower, when its flaming red flowers light up the forests in the late summer or early autumn. It grows in low, wet places, and along streams. Its properties have long been known to the Indians; but Dr. Thompson, the founder of the "Thompsonian" practice of medicine, first brought it into general use, and established its efficacy in the treatment of various diseases. This herb properly administered will subdue diseases of long standing, that have resisted the power of every other remedy. It is one of the most powerful and effective emetics that can be given, and is of incalculable value in the treatment of all morbid affections of the stomach, poisoning, etc. There is scarcely a case arising from a morbid and bilious condition of the stomach and other viscera, in which an emetic may not be taken with great advantage to the patient as it expels all morbid matter, and removes all obstructions which retard the process of digestion. It may be administered occasionally in all cases of dyspepsia and indigestion, cholera morbus, diarrhoea, dysentery, etc. Whatever may be the patient's prejudice against this harmless but powerful remedy, it will be removed on taking one or two doses, followed with the expulsion from the stomach of half a pint or more of morbid or bilious matter, the speedy return of his appetite, and a feeling better generally, and at the stomach particularly.

The best method of administering it is as follows :

Take one teaspoonful of ginger, put in a pitcher and pour on one quart of hot water. When a little cool, take a teacupful, (with sugar if you like,) and repeat every five minutes till all is drank up ; now put a teaspoonful of a mixture (equal parts) of bayberry bark and ginger into the pitcher, and pour on another quart of boiling water ; let it steep a few minutes and then take a teaspoonful of the pulverized leaves of lobelia in a cup, which fill two-thirds full of the tea from the pitcher ; let it stand covered for five minutes, then give the patient one half of it, to be followed by more of the new tea. If after the lapse of five or ten minutes, vomiting does not ensue, give the balance of the lobelia and drink again of the tea till it commences, and the stomach becomes thoroughly evacuated. Should the first dose produce the desired effect, then pour more water on the grounds in the pitcher ; drink again of the tea and the remaining portion of the lobelia, as in the first dose. If the bayberry and the ginger cannot at all times be had, use pennyroyal tea in the same manner. This emetic is simple and can be administered by almost any adult person, and in nine cases out of ten will be sufficient to completely evacuate the stomach, while now and then a case will require double the quantity of lobelia.

MAY WEED.—Stimulant and tonic ; useful in febrile attacks, sudden colds, coughs, etc. It is commonly used in the form of tea ; induces perspiration and sometimes vomiting.

MARSH ROSEMARY.—The root is astringent and tonic, and may be used in all cases where these properties are required. A decoction of this is an excellent remedy for canker sores, sore mouth, etc.

MOTHERWORT.—An active nervine. It will relieve nervous headache.

MULLEN.—Useful in several diseases ; simmered in lard it is good for the piles.

PENNYROYAL.—An agreeable stimulant, and if to be had should always be used in giving an emetic. It promotes perspiration, and facilitates the operation of lobelia. It is also a valuable carminative, and may be safely used in all slight attacks of disease.

PEPPERMINT.—A pleasant stimulant, promotes perspiration, and may be used in all cases of colds, pain in the stomach and bowels, flatulency, headache, nausea, etc. It is most usually sold in the essence or the oil.

PLANTAIN.—Possesses active healing properties. Combined with lard it is good for salt rheum ; its juice will cure the bite of a snake.

POPLAR.—The bark is a pleasant tonic, useful in loss of appetite, indigestion, diarrhea, worms, and headache. It possesses diuretic properties, and may be used in strangury and all diseases of the urinary organs. Dose—a teaspoonful of the powdered bark.

SKULLCAP.—This is a most valuable nervine, and anti-spasmod-

ic. It may be used successfully in delirium tremens, fits, lock-jaw, St. Vitus' dance, and all nervous diseases. It is also recommended in hydrophia. Dose—a teaspoonful of the powdered herb.

SAGE.—Frequently used as a substitute for tea. It is useful in fevers as a hot drink, and frequently given to children for worms.

SAFFRON.—Makes a valuable tea for children afflicted with the measles, chicken pox, and all eruptive diseases.

SASSAFRAS.—A well known shrub or tree. The leaves, young twigs and bark, are all aromatic, and slightly stimulant. The peculiar properties are most fully developed in the bark of the roots. A much esteemed flavoring extract is made from the roots. The leaves steeped in water make an excellent wash for all kinds of humors.

SKUNK CABBAGE.—Takes its name from the disagreeable odor of its leaves and fruit. The root is stimulant and expectorant; useful in coughs, asthma, and all pulmonary complaints. It is also given to children to destroy worms.

SMART WEED.—Is a powerful stimulant, and produces free perspiration. It is an excellent remedy to break up a cold when threatened with fever. In the form of a hot tea it is a useful bath for swelled and stiff joints.

SPEARMINT.—A tonic and stimulant; used to stop vomiting and allay nausea. Is an excellent carminative and promotes perspiration, warms and invigorates the system, and quiets pain in the stomach and bowels.

SUMACH.—The leaves and berries (or bobs) are stimulant, astringent and tonic, beneficial in dysentery, stranguary, and sore mouth; also for washing offensive sores and ringworms. It is used quite extensively as a dye-stuff, producing several shades of yellow and black.

SLIPPERY ELM.—The inner bark of this tree is the only portion used for medicinal purposes. It is mucilaginous and nutritious, and may be employed in all cases of inflammation, debility, diseases of the urinary passages, diarrhea, dysentery, pleurisy, and sore throat. The pulverized bark made into poultice is good for boils, and all kinds of inflamed sores.

SWEET FLAG.—(*Acorus Calamus*.)—A powerful medicine of transient tonic effect, especially in case of weak digestion. In Britain it is principally used by perfumers in the manufacture of hair powders.

VIRGINIA SNAKE-ROOT.—(*Aristolochia Serpentaria*.)—It possesses strong stimulant and tonic properties; is supposed to be a remedy for the bite of a rattlesnake. It forms an important article of commerce, bearing a high price, being highly esteemed as a medicine in certain kinds of fever.

UNICORN.—The root is a valuable tonic, beneficial in all female complaints, particularly so in leucorrhœa; also in pleurisy, gene-

ral debility, weakness of the digestive organs, and coughs. Dose.—from half to a teaspoonful of the powdered root.

VALERIAN.—Good in all nervous complaints; a swallow or two taken occasionally will produce the same effect as paregoric, and is every way preferable to it.

WINTERGREEN.—(PIPSISSEWA.)—A stimulant, diuretic, astringent and tonic; useful in scrofulas, tumors, cancers and kidney complaints. The tea is also useful as a wash for ill-conditioned sores and cutaneous eruptions.

WITCH HAZEL.—The bark and leaves are astringent and tonic. May be used in all cases of hemorrhage, debility, and for cleansing irritable sores.

WORMWOOD.—The medicinal properties of this herb was well known to the ancients. It is aromatic and bitter, containing a bitter principle and an essential oil, both of great strength. It is used in medicine in various forms, as oil, extract, tincture, etc., as a stomachic and anthelmintic or vermifuge, and a febrifuge. The stems and leaves are steeped to make a strong decoction.—Used for strained, sprained, and stiff joints.

YARROW.—Is a valuable stimulant, an excellent remedy in all cases of female weakness, colic and intermittent fevers. A decoction of the herb is used as a wash for sores, salt rheum and piles.

Spavin Liniment.

The following recipe has been sold for \$50, and has never before been published. The person from whom we received it has tried it in several cases and has always found it to work like a charm. One particular instance he tells us of. He had a large, fine span of horses, that were troubled with spavins and windgalls, so that he could not sell them for any price. After securing this recipe, he went to Dr. Starkweather's and procured the ingredients and applied the medicine. In the course of a few weeks' treatment they were entirely sound, and he afterwards sold the span for \$600. He made more than fifty dollars out of the recipe in a very short time. Our patrons get the same with a thousand others

for the small sum of \$1.50. The following are a few of the evils to which horse-flesh is heir to, that are effectually cured by this liniment: Spavins, ringbones, windgalls, splints, curbs, etc.

To 1 pint alcohol add corrosive sublimate 1 ounce, spanish flies 1 ounce. Apply to the parts affected at night; in the morning, with a sharp-edged stick, rub or press out the pus or matter, and thoroughly wash the parts with soap suds; at night make another application of the liniment, and continue for three or four days, and then skip three days; after which, if necessary, go through the application as at first. Most commonly the first three or four applications will effect a cure.

Cure for Colic in Horses.

This is a not infrequent ailment in horses, and is so violent as a general thing, that its treatment should be prompt and effective. The following is an unfailing remedy:

To 1 pint of water add 2 ounces of sulphuric ether. Give the whole at one dose.

Convenient Rules For Measuring. &c.

The following rules and examples will frequently be found convenient for farmers, stock buyers, and others. That for determining the weight of cattle, especially, will be of almost daily application.

To Measure Wheat in the Bin.

In measuring grain, according to the U. S. standard, 2150 cubic inches make a bushel. As a cubic foot contains 1728 cubic inches, a bushel is to a cubic foot as 2150 to 1728; or as 4 to 5. Therefore to convert cubic feet to bushels, it is only necessary to multiply by four fifths.

EXAMPLE.—How much grain will a bin hold which is 10 feet long, 4 feet wide, and 4 feet deep?

Solution.— $10 \times 4 \times 4 = 160$ cubic feet. $160 \times 4.5 = 128$, the number of bushels.

To Measure Grain on the Floor.

Make the pile in form of a pyramid or cone, and multiply the area of the base by one third the height. To find the area of the base, multiply the square of its diameter by the decimal .7854.

EXAMPLE.—A conical pile of grain is 8 feet in diameter, and 4 feet high; how many bushels does it contain?

Solution.—The square of 8 is 64; and $64 \times .7854 \times 4.3 = 83.776$, the number of cubic feet; and $83.776 \times 4.5 = 67.02$ bushels.

To Measure Logs.

To ascertain the quantity of lumber in a log, multiply the diameter in inches at the small end by one-half the number of inches, and this product by the length of the log in feet, which last product divide by 12.

EXAMPLE.—How many feet of lumber can be made from a log which is 36 inches in diameter and 10 feet long?

Solution.— $36 \times 18 = 648$; $648 \times 10 = 6480$; $6480 \div 12 = 540$. *Ans.*

To Measure Cisterns or Wells.

To ascertain the capacity of a cistern or well, multiply the square of the diameter in inches by the decimal .7854, and this product by the depth in inches; divide this product by 231, and the quotient will be the contents in gallons.

EXAMPLE.—What is the capacity of a cistern which is 12 feet deep and 6 feet in diameter?

Solution.—The square of 72, the diameter in inches, is 5184;— $5184 \times .7854 = 4071.51$; $4071.51 \times 144 = 586297.44$, the number of cubic inches in the cistern. There are 231 cubic inches in a gallon, therefore $586297.44 \div 231 = 2538$ gallons. To reduce the number of gallons to barrels, divide by $31\frac{1}{2}$.

To Ascertain the Weight of Cattle by Measurement.

Multiply the girth in feet, by the distance from the bone of the tail immediately over the hinder part of the buttock, to the fore part of the shoulder blade; and this product by 31, when the animal measures more than 7 and less than 9 feet in girth; by 23 when less than 7 and more than 5; by 16, when less than 5, and more than 3; and by 11, when less than 3.

EXAMPLE.—What is the weight of an ox whose measurements are as follows; girth, 7 feet 5 inches, length, 5 feet 6 inches?

Solution.— $5\frac{1}{2} \times 7\frac{5}{12} = 40\frac{57}{12}$; $40\frac{57}{12} \times 31 = 1264$. *Ans.*

A deduction of 1 pound in 20 must be made for half-fattened cattle, also for cows that have had calves. It is understood, of course, that such standard will at best, give only the *approximate* weight.

Cement for Earthenware.

The following cement for broken earthenware is easily made and the materials almost always on hand. It dries quickly and resists the action of water, and a considerable degree of heat :

To a half a pint of milk, put an equal quantity of vinegar to curdle it. Take only the whey, and mix 4 or 5 eggs, beating the whole together. When mixed, add sifted quick lime until it acquires the consistence of a thick paste.

A Convenient Syrup.

A pure syrup that will not granulate, for various purposes—for soda and other summer drinks, may be made as follows :

Dissolve 20 pounds best coffee sugar in 1 gallon of water, by putting over the fire and heating, skimming off all impurities if any, that rise to the top. When cold, put in a keg or jug, and keep corked for use as wanted.

The Cental System.

This is a new system of measuring grain that is fast being adopted in all the larger towns and cities of the United States, in which the cental, or 100 lbs. takes the place of the bushel. The new system grows in favor fast, and it will be but a few years before the bushel, as a measure of grain will be no longer heard of. But the substitution of the new system for the old, will for some time, create more or less confusion, and occasion more or less perplexity. To relieve that perplexity as much as possible, we publish the following tables, showing, with wheat or other grain at a certain price per bushel, what will be the price per cental at the same rate. This will be convenient for reference for some time to come:

WHEAT.

Per Bushel	Per Cental	Per Bushel	Per Cental	Per Bushel	Per Cental
\$ 40.....	\$ 66 $\frac{2}{3}$	1.04.....	1.73 $\frac{1}{4}$	1.68....	2.80
42.....	70	1.06.....	1.76 $\frac{2}{3}$	1.70.....	2.83 $\frac{1}{8}$
44.....	73 $\frac{1}{3}$	1.08.....	1.80	1.72.....	2.86 $\frac{2}{3}$
46.....	76 $\frac{2}{3}$	1.10.....	1.83 $\frac{1}{3}$	1.74.....	2.90
48.....	80	1.12.....	1.86 $\frac{2}{3}$	1.76.....	2.93 $\frac{1}{3}$
50.....	83 $\frac{1}{3}$	1.14.....	1.90	1.78.....	2.96 $\frac{2}{3}$
52.....	86 $\frac{2}{3}$	1.16.....	1.93 $\frac{1}{4}$	1.80.....	3.00
54.....	90	1.18.....	1.96 $\frac{2}{3}$	1.82.....	3.03 $\frac{1}{8}$
56.....	93 $\frac{1}{2}$	1.20.....	2.00	1.84.....	3.06 $\frac{2}{3}$
58.....	96 $\frac{2}{3}$	1.22.....	2.03 $\frac{1}{8}$	1.86.....	3.10
60.....	1.00	1.24.....	2.06 $\frac{2}{3}$	1.88.....	3.13 $\frac{1}{8}$
62.....	1.03 $\frac{1}{3}$	1.26.....	2.10	1.90.....	3.16 $\frac{2}{3}$
64.....	1.06 $\frac{2}{3}$	1.28.....	2.13 $\frac{1}{2}$	1.92.....	3.20
66.....	1.10	1.30.....	2.16 $\frac{2}{3}$	1.94.....	3.23 $\frac{1}{3}$
68.....	1.13 $\frac{1}{3}$	1.32.....	2.20	1.96.....	3.26 $\frac{2}{3}$
70.....	1.16 $\frac{2}{3}$	1.34.....	2.23 $\frac{1}{3}$	1.98.....	3.30
72.....	1.20	1.36.....	2.26 $\frac{2}{3}$	2.00....	3.33 1-3
74.....	1.23 $\frac{1}{3}$	1.38.....	2.30	2.02.....	3.36 2-3
76.....	1.26 $\frac{2}{3}$	1.40.....	2.33 $\frac{1}{3}$	2.04.....	3.40
78.....	1.30	1.42.....	2.36 $\frac{2}{3}$	2.06.....	3.43 1-3
80.....	1.33 $\frac{1}{3}$	1.44.....	2.40	2.08.....	3.46 2-3
82.....	1.36 $\frac{2}{3}$	1.46.....	2.43 $\frac{1}{3}$	2.10.....	3.50
84.....	1.40	1.48.....	2.46 $\frac{2}{3}$	2.12.....	3.53 1-3
86.....	1.43 $\frac{1}{3}$	1.50.....	2.50	2.14.....	3.56 2-3
88.....	1.46 $\frac{2}{3}$	1.52.....	2.53 $\frac{1}{3}$	2.16.....	3.60
90.....	1.50	1.54.....	2.56 $\frac{1}{2}$	2.18.....	3.63 1-3
92.....	1.53 $\frac{1}{3}$	1.56.....	2.60	2.20.....	3.66 2-3
94.....	1.56 $\frac{2}{3}$	1.58.....	2.63 $\frac{2}{3}$	2.22.....	3.70
96.....	1.60	1.60.....	2.66 $\frac{2}{3}$	2.24.....	3.73 1-3
98.....	1.63 $\frac{1}{2}$	1.62.....	2.70	2.26.....	3.76 2-3
1.00.....	1.66 $\frac{2}{3}$	1.64.....	2.73 $\frac{1}{3}$	2.28.....	3.80
1.02.....	1.70	1.66.....	2.76 $\frac{2}{3}$	2.30.....	3.83 1-3

CORN AND RYE.

Per Bushel	Per Cental	Per Bushel	Per Cental	Per Bushel	Per Cental
\$ 20....	\$ 35 5-7	56.....	1.00	92....	1.64 2-7
22....	39 2-7	58.....	1.03 4-7	94.....	1.67 6-7
24....	42 6-7	60.....	1.07 1-7	96....	1.71 3-7
26....	46 3-7	62.....	1.10 5-7	98....	1.75
28....	50	64.....	1.14 2-7	1.00....	1.78 4-7
30....	53 4-7	66.....	1.17 6-7	1.02....	1.82 1-7
32....	57 1-7	68.....	1.21 3-7	1.04....	1.85 5-7
34....	60 5-7	70.....	1.25	1.06....	1.89 1-7
36....	64 2-7	72.....	1.28 4-7	1.08....	1.92 6-7
38....	67 6-7	74....	1.32 1-7	1.10....	1.95 3-7
40....	71 3-7	76.....	1.35 5-7	1.12.....	2.00
42....	75	78.....	1.39 2-7	1.14....	2.03 4-7
44....	78 5-7	80.....	1.42 6-7	1.16....	2.07 1-7
46....	82 1-7	82.....	1.46 3-7	1.18....	2.10 5-7
48....	85 5-7	84.....	1.50	1.20....	2.14 2-7
50....	89 2-7	86.....	1.53 4-7	1.22....	2.16 6-7
52....	92 6-7	88.....	1.57 1-7		
54....	96 3-7	90.....	1.60 5-7		

BARLEY.

Per Bushel	Per Cental	Per Bushel	Per Cental	Per Bushel	Per Cental
\$ 40....	\$ 83 1-3	72....	1,50	1,04....	2,16 2-3
42....	87 1-2	74....	1,54 1-6	1,06....	2,20 5-6
44....	91 2-3	76....	1,56 1-3	1,08....	2,25
46....	95 5-6	78....	1,62 1-2	1,10....	2,29 1-6
48....	1,00	80....	1,66 2-3	1,12....	2,33 1-3
50....	1,04 2-6	82....	1,70 5-6	1,14....	2,37 1-2
52....	1,08 1-3	84....	1,75	1,16....	2,41 2-3
54....	1,12 1-2	86....	1,79 1-6	1,18....	2,45 5-6
56....	1,16 2-3	88....	1,83 1-3	1,20....	2,50
58....	1,20 5 6	90....	1,87 1-2	1,22....	2,54 1-6
60....	1,25	92....	1,91 2-3	1,24....	2,58 1-3
62....	1,29 1-6	94....	1,95 5-6	1,26....	2,62 1-2
64....	1,33 1-3	96....	2,00	1,28....	2,66 2-3
66....	1,37 1-2	98....	2,04 1-6	1,30....	2,70 5-6
68....	1,41 2-3	1,00....	2,08 1-3		
70....	1,45 5-6	1,02....	2,12 1-2		

OATS.

Per Bushel.	Per Cental.	Per Bushel.	Per Cental.	Per Bushel.	Per Cental.
\$ 20....	\$ 57 1-7	47....	1,34 2 7	74....	2,11 3-7
21....	60	48....	1,37 1-7	75....	2,14 2-7
22....	62 6-7	49....	1,40	76....	2,17 1-7
23....	65 5-7	50....	1,42 6-7	77....	2,20
24....	68 4-7	51....	1,45 5-7	78....	2,22 6-7
25....	71 3-7	52....	1,48 4-7	79....	2,25 5-7
26....	74 2-7	53....	1,51 3-7	80....	2,28 4-7
27....	77 1-7	54....	1,54 2-7	81....	2,31 3-7
28....	80	55....	1,57 1-7	82....	2,34 1-7
29....	82 6-7	56....	1,60	83....	2,37 1-7
30....	85 5-7	57....	1,62 6-7	84....	2,40
31....	88 4-7	58....	1,65 5-7	85....	2,42 6-7
32....	91 3-7	59....	1,68 4-7	86....	2,45 5-7
33....	94 2-7	60....	1,71 3-7	87....	2,48 4-7
34....	97 1-7	61....	1,74 2-7	88....	2,51 3-7
35....	1,00	62....	1,77 1-7	89....	2,54 2-7
36....	1,02 6-7	63....	1,80	90....	2,57 1-7
37....	1,05 5-7	64....	1,82 3-7	91....	2,60
38....	1,08 4-7	65....	1,85 5-7	92....	2,62 6-7
39....	1,11 3-7	66....	1,88 4-7	93....	2,65 5-7
40....	1,14 2-7	67....	1,91 3-7	94....	2,68 4-7
41....	1,17 1-7	68....	1,94 2-7	95....	2,71 3-7
42....	1,20	69....	1,97 1-7	96....	2,74 2-7
43....	1,22 6-7	70....	2,00	97....	2,77 1-7
44....	1,25 5-7	71....	2,02 6-7	98....	2,82 6-7
45....	1,28 4-7	72....	2,05 5-7	99....	2,85 5-7
46....	1,31 3-7	73....	2,08 4-7	1,00....	2,95 5-7

Weights of grain per bushel are estimated in the foregoing table :

	lbs.
Wheat	60
Corn	56
Rye	56

	lbs.
Barley	48
Oats	35

Convulsions---Their Treatment.

This is a form of disease that very frequently affects infants, in which the body is thrown into violent contractions, the sensibility and voluntary motion being for a time suspended. Convulsions or fits may last for a few minutes or even hours, and may readily prove fatal if not relieved within a short period. The first symptom observed is often a twitching of particular muscles, and a change in the habitual expression or color of the face, with distortion of the features, and turning of the globes of the eyes suddenly upwards. Their cause is usually to be found in some source of irritation, capable of producing fever if long continued ; as for instance, disordered dentition, worms in the intestines, whooping-cough, etc.

When a child is suddenly seized with convulsions, or with a tendency to spasm, such as twitching of the features or contractions of the fingers and toes, it should be placed at once in a free current of air, with its feet towards the fire. The extremities should be kept warm, a cold lotion may be applied to the head, especially if there is much flushing of the face ; a little castor oil may be given if the bowels are confined ; and if there is flatulence the belly may be rubbed with a warm hand, or with some simple stimulating liniment, as camphorated oil. Not much more can be done without medical assistance. But in the event of the case being very serious, and medical aid at a great distance it might be right to cause the child to inhale a little chloroform, great care being taken that plenty of air is also admitted into the lungs.

Good Samaritan Pain Killer.

The following is said to be the genuine Perry Davis' Pain Killer, but for that we cannot vouch ; but for one thing we can vouch, and that is the fact, if

it is not, it is as good as that celebrated medicine:

To 1 pint best alcohol add gum arabic $\frac{1}{2}$ ounce, gum myrrh, gum camphor and pulverized cayenne pepper, each $\frac{1}{4}$ ounce.—Agitate occasionally for 6 to 10 days, then let it settle and it is ready for use. Apply freely to the parts affected, bathing it in well with the hand. Or, if necessary, take it inwardly, until relieved. Dose, 1 teaspoonful, repeated according to the necessities of the case.

Genuine Healing Balsam.

The following is a valuable preparation for coughs, internal pains or strains, : also for acute or chronic affection of the kidneys. It may be safely given to children in doses of 1 to 5 drops, on a little sugar, according to the age, or the ability of the stomach to bear it. Dose for an adult, 6 to 12 drops according to the necessities of the case.

Melt $1\frac{1}{2}$ pounds clear, pale rosin, and add 1 pint spirits turpentine, then add 2 ounces strained honey, 2 ounces balsam of fir, and $\frac{1}{2}$ ounce each of Venice turpentine, oil of hemlock, and oil of origanum. Mix the whole thoroughly, and keep in a well-corked bottle.

Nonpareil Sticking Plaster.

This is an article that should be kept in every household, as it is in frequent demand. Make your own after the following directions and you will never buy another:

To 6 spoonfuls of isinglass melted in a very little water, add 2 spoonfuls balsam of Peru, and strain. Mix well in a small stone jar over the fire. Pin out some black Persian or Sarsenet on a board, and dipping a brush into the mixture, pass it over the silk five or six times; then hold it to the fire, but not very near, and it will soon be black and shining.

Lip Salve.

The following will be found an excellent remedy for cracked lips:

Steep a small quantity of alkanet root in 8 ounces of olive oil,

strain it and add 20 drops of otto ; then melt together 4 ounces prepared mutton suet, $1\frac{1}{2}$ ounces white wax, and 2 ounces spermaceti; when fairly melted, add the oil as prepared.

Blackberry Cordial.

In blackberry time prepare the following wine cordial as a delightful beverage, and an infallible remedy for diarrhoea :

To $\frac{1}{2}$ bushel of blackberries, well mashed, add 4 ounces allspice, 2 ounces cinnamon, 2 ounces cloves; pulverize well, mix and boil slowly until properly done; then strain or squeeze the juice through homespun or flannel, and add to each pint of the juice 1 pound of loaf sugar; boil again for some time, take it off and while cooling add half a gallon of good Cognac brandy.—Dose for an adult, half a gill; for a child a teaspoonful according to age.

Hair Wash.

The following simple preparation is given to us by one who has used it for years, as being the best wash for the head in use.

To 1 quart boiling water, add 1 ounce powdered borax and $\frac{1}{2}$ ounce gum camphor, powdered. Shake well and when cool, pour into a bottle for use. Clean the head with this thoroughly once a week, applying it with a sponge or a flannel cloth.

For Burns and Scalds.

We have already, (page 221) given several remedies for burns, but as this is convenient, the materials being almost always at hand, we give it a place here :

Take equal parts of olive oil and lime water, (page 302,) which when well mixed together, forms a beautiful white ointment, that may be spread with a feather upon the parts affected, and a thin rag laid upon it. Two or three dressings will generally take out all the fire, after which apply a little healing ointment.

Families should always have this remedy by them ready for use. If applied immediately after the accident, it gives instant relief.

Wash Balls.

The following, formed into round balls, makes a pleasant and efficient toilet soap :

Take white soap 7 pounds, pearlash 6 ounces, orris powder 8 ounces, bergamot 1 ounce, oil of lavender, $\frac{1}{2}$ ounce, cassia oil, $\frac{1}{4}$ ounce, oil of cloves, 1 drachm, caraway, $\frac{1}{2}$ drachm. Mix with water to a paste, and finish in balls.

Antiseptic Tooth Powder.

A tooth powder made as follows is an active preservative and preventive of decay, and if used regularly will be as good as an insurance policy against toothache :

Mix well precipitated chalk, 1 ounce; burnt alum, 2 drams;—Armenian bole, 2 drams; oil of cloves, 12 drops. Keep in a well stoppered bottle.

Tooth Paste.

The following is an excellent paste for cleaning the teeth, and to cause the gums to grow close to the enamel :

Mix thoroughly together powdered myrrh, 1 ounce; powdered sage, 2 drachms; best honey 2 ounces. Rub the teeth and gums with the paste night and morning.

Toothache Balsam.

There are few people, old or young, who have not felt the inconvenience of an aching tooth, or who do not know from experience the blessedness of relief from the racking pain, and can therefore appreciate the value of a medicine that can always be relied on for instant relief. The application of the following balsam gives ease to all manner of pains in the teeth, proceeding from whatever cause. For decayed teeth a piece of cotton wool should be saturated with the

balsam and inserted into the hollow part. If the teeth ache generally, the gums should be rubbed with a little of the balsam till relieved :

Take essential oil of origanum, 1 drachm; essential oil of cloves, 1 drachm; tincture of henbane, $\frac{1}{2}$ drachm; sweet spirits of nitre, 2 drachms; tincture of opium, 2 drachms; white wax, $\frac{1}{2}$ ounce. Melt the white wax, and while in a liquid state, add the other ingredients, previously mixed, and stir all together until thoroughly incorporated.

To Make Paper Fire Proof.

Paper may be made fire-proof by dipping it in a strong solution of alum water. When thoroughly dry it will resist the action of flame. Some paper requires to imbibe more of the solution than it will take up at a single immersion, and when this is the case, the process must be repeated until it becomes thoroughly saturated.

Substitute for a Copying Machine.

In the common ink used, dissolve lump sugar (1 dram to 1 ounce of ink). Moisten the copying paper, and then put it in soft or unsized paper (newspaper) to absorb the superfluous moisture. Put the moistened paper on the writing; place both between some soft paper, and roll upon a ruler three or four times.

Japanese Cement.

This is a beautiful, white cement, that dries almost transparent. There are many uses to which it may be put, but it is especially adapted to the making of curious paper articles, as tea-trays, card baskets, ladies' dressing boxes, and other articles that require layers of paper to be cemented together.

Mix rice flour intimately with cold water, and gently boil it until it is of the proper consistency. Papers pasted together with this, will sooner separate in their own substance than at the joining.

Saponaceous Cream of Almonds.

This preparation has been extensively sold as a shaving soap, and has justly been held in high esteem by barbers and those who do their own shaving.

ing. Barbers will find the recipe worth many times the cost of the book, in the saving of soap and the increased satisfaction of their customers ;

Melt 7 pounds clarified lard in a porcelain vessel by a salt water bath ; then run in very slowly, stirring all the time, $3\frac{3}{4}$ pounds potash lye, (containing 26 per cent of caustic potash ; when about half the lye is in, the mixture begins to curdle, and will by the time it is all in be so firm that it cannot be stirred. Then take 3 ounces rectified spirits and add to it 2 drams otto of almonds.—Triturate the cream in a mortar and gradually add the perfumed alcohol, when the cream will assume the beautiful, pearly appearance that has made it so popular.

To Make Fire Kindlers.

Kindling fires is no small portion of the work of housekeeping. Kindling made after the following recipe will save much trouble, vexation and time, as well as expense. It is easily ignited from a match, and burns with a strong blaze long enough to start any wood fit to burn. If thrown on the top of a grate full of coal, they will kindle a fire in a very short time :

Take a quart of tar and 3 pounds of rosin ; melt them, bring to a cooling temperature, mix with as much saw-dust, with a little charcoal added, as can be worked in ; spread out while hot on a board ; when cold, break up into lumps of the size of a large hickory nut and you have at a small expense, kindling material enough for a household one year.

Coffee Syrup.

This is a confection exceedingly handy for travelers on a journey, when they expect to be out of the range of the facilities of first class hotels. It is always ready :

Take $\frac{1}{2}$ pound of best ground, roasted coffee ; boil it in a saucepan containing 3 quarts of water, until the quantity is reduced to 1 quart ; then strain it off, and when freed from all impurities, pour the liquor into a clean sauce pan and let it boil again adding as much Lisbon sugar as will make it a thick syrup, like treacle ;

remove it from the fire and when cold pour it into bottles, corking them down tight, and it is ready for use. 2 teaspoonfuls of the syrup introduced into a moderate sized teacup, and filled up with boiling water, will be fit for immediate use. If milk is at hand. add to taste.

Oyster Omelet.

The following will be found a rich and palatable dish :

For every 6 large or 12 small oysters, 1 egg. Remove the hard part of the oyster and mince the remainder fine. Take all the yolks of the eggs and half the whites; beat till very light, then mix in the oysters with a little pepper and beat all up thoroughly; put a gill of butter into the frying pan and when fairly melted, pour in the omelet and stir until it begins to thicken; fry it to a light brown and take out carefully on to a hot plate. Don't fold it over as that will make it heavy.

Mint Sauce.

This sauce is seldom used but with roast lamb ; some people think they cannot eat roast lamb without it :

Pick, wash and chop fine some green spearmint ; to 2 table-spoonfuls of the minced leaves put 8 of vinegar, adding a little brown sugar. Serve cold in a sauce tureen.

Tongue Toast.

Try the following if you want a delicate and delicious toast for breakfast :

Take a cold smoked tongue that has been well boiled, and mince it fine. Mix it with cream and yolk of egg beaten, and give it a simmer over the fire. Toast very nicely some slices of bread, butter them slightly, and lay them in a deep dish heated before the fire; cover each slice of the toast thickly with the tongue mixture, spread on hot. Send to the table covered.

To Fry Oysters.

One of the best ways that oysters can be cooked, is to fry them. The following is the way to do it :

Beat up 2 or 3 eggs in a cup, and rasp bread crumbs on a plate with sweet herbs powdered, and lemon peel. Dry the oysters as much as possible, souse them in the egg and cover them with crumbs. Fry them in plenty of good butter.

Blanc Mange.

This is one of the most delicate preparations ever brought upon the table, and everybody should have the process of making it convenient for reference. As a dessert or fancy dish it is preferred by many to ice cream :

To 1 ounce isinglass add $\frac{1}{2}$ pint of new milk ; let it soak five minutes ; boil 2 or 3 laurel leaves (or some other flavoring material) in a pint of cream and $\frac{1}{2}$ pint of milk ; when boiling, pour it over the soaked isinglass, and stir till dissolved ; add 4 or 5 ounces of loaf sugar, and a little brandy if approved ; strain through muslin ; stir occasionally till it thickens, then put into moulds. Eat with sweetened cream.

Grape Preserves.

The following is one of the most delicious preserves in the whole category of sweetmeats :

Take fine sound Isabella or Concord grapes ; squeeze each grape between the thumb and finger, so as to remove the pulp ;—put these into one dish, and the skins into another ; then place the pulps thus separated into the preserving kettle, and scald them ; as soon as they melt, strain them through a fine cullender sieve in order to separate the seeds ; place the liquid thus obtained, together with the skins, and a pound of sugar to each pound of fruit, in the kettle and boil 20 minutes.

Boston Cream Cakes.

These form a delicious and much sought after dainty, which you should know how to prepare, when occasion requires :

For the crust—take 1 pound of flour, $\frac{1}{2}$ pound butter, 1 pint of warm water, 10 eggs ; boil the water and butter together ; stir in the flour while it is boiling ; when cold, add the eggs well beaten and then the flour. For the custard take 1 quart of milk, 4 eggs, 2 cups of sugar, and 1 cup of flour ; boil the milk, and while it is boiling add the sugar, eggs, and flour, and flavor with lemon.—Drop the crust on tins, and bake them in a quick oven 15 or 20 minutes ; when done, open them at the sides, and put in as much custard as possible. It improves the appearance of the crust to rub over with the white of an egg before it is baked.

Indian Meal Gruel.

Strange as it may seem, there are many good housekeepers who when ordered to make a little water gruel for a sick person, have to confess that they do not know how. For the benefit of such we give the following :

Sift Indian meal through a fine sieve; wet 2 spoonfuls of this meal with cold water, and beat it till there are no lumps; then stir it into $1\frac{1}{4}$ pints of boiling water, and let it boil half an hour, stirring it all the time. Season to taste.

To Fry Egg Plant.

We have given one way of cooking this delicious vegetable fruit (on page 353), but another way will not be out of place :

Cut the egg plant into slices $\frac{1}{4}$ inch thick; let it lie for several hours in salted water to remove the bitter taste. Heat a small quantity of butter; when very hot, put in the slices; turn them when one side is done. Let them cook thoroughly.

Irish Stew.

Take a piece of loin or back-ribs of mutton, and cut it into chops. Put it in a stew pan with pared raw potatoes, sliced onions to taste, pepper, suet, and a little water. Put this on to stew slowly for an hour, covered very close, and shake it occasionally to prevent it from sticking to the bottom.

To Cure Chapped Hands and Faces.

The following cheap and convenient process will ensure you against chapped hands or face, and protect the skin against the worst winds :

Put three to six drops of glycerine into the water before washing the hands, or drop one drop in the palm of the hand after washing off the soap and dirt, rub all over the hands and wrists, then dry them thoroughly.

To Make the Hands White.

Many people are anxious to preserve their hands soft, white and smooth. An imperative pre-requi-

site to this is to have the hands thoroughly washed. Wash in warm water with fine soap and dry carefully with a moderately coarse towel, rubbing well to insure a brisk circulation, than which nothing can be more effectual in promoting a transparent and soft appearance. Almond paste made as follows, helps to preserve the delicacy of the hands:

Blanch and beat up 4 ounces of bitter almonds; add to them 3 ounces lemon juice, 3 ounces almond oil, and a little weak spirits of wine. Rub the hands with it on retiring. Or take 2 ounces sweet almonds, beat with 2 drams of white wax and 3 drams of spermaceti; put up carefully in rose water.

Razor Paste.

The following is the best paste for a razor strop ever yet tried:

Emery, reduced to an impalpable powder, 2 parts; spermaceti ointment 1 part. Mix together and rub it over the strop.

Liquid Bloom of Roses.

Put 30 grains of crimson lake in powder, into a bottle; then add of strong solution of ammoniac 30 drops, esprit de rose, $\frac{1}{4}$ ounce, rose water $1\frac{1}{2}$ ounces, and otto of roses 2 drops,

To Make Grease Balls.

The following preparation for extracting grease from clothing, will be found convenient and effectual:

Shave down $\frac{1}{2}$ pound of white soap and mix with 3 ounces of fuller's earth powdered. Then mix 3 ounces of ox-gall and 2 ounces of spirits of turpentine. With this moisten the soap and fuller's earth, till you have a stiff paste. Mix it thoroughly and beat it well. Make it into balls with your hands, and place the balls where they will dry slowly. To use it, scrape down a sufficiency and spread it on the grease-spot. Let it rest awhile, then brush it off and scrape and apply some more. A few applications will generally remove the grease.

Treatment of Sunstroke.

In cases of coup de soleil, or sunstroke, which occurs more or less frequently every summer in city and country, the proper way is to pour cold water over the head, until relief is obtained.







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